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(See pp. 609 through 628)

Vol. IX *September-October, 1946* **No. 5**

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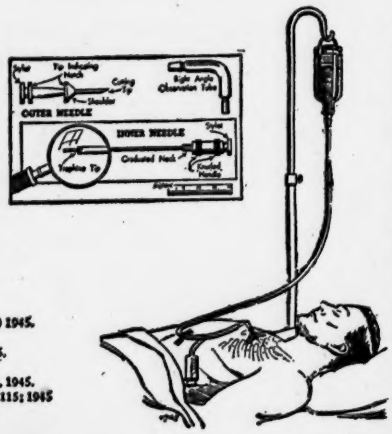

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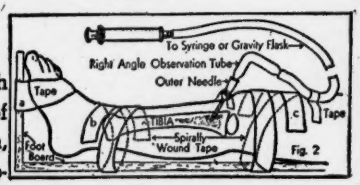

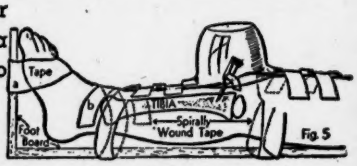

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Original Articles

The Surgical Treatment of Cancer of the Rectum and Pelvic Colon Without Colostomy and With Preservation of Sphincter Muscles*

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THE magnitude of the cancer problem is almost inconceivable. It should be realized that five hundred thousand persons—half a million—are so stricken in the United States every year. From this group, it is not difficult to select those affected by carcinoma of the rectum and pelvic colon.

Through the pioneer work of Babcock,[1] we became interested in the method by which colostomy may be eliminated in the surgical treatment of rectal carcinoma. Our early results (with five patients) were quite disheartening; the procedure was discontinued in favor of colostomy and posterior excision (Lockhart-Mummery), the two-stage abdominoperineal maneuver (Lahey) and, particularly, the popular abdominoperineal resection of Miles. However, over the ensuing period, the constant disfavor with which a colostomy was regarded by the patients and their frequent refusal to undergo surgery where an abdominal stoma was an essential part of such an operation, caused us to review our experience of former years.

Of the five patients who underwent "proctosigmoidectomy," three died of peritonitis due to interference with the blood supply of the bowel and the other two, although still living (7 and 9 years later respectively), had no control of their daily evacuations. Since it was evident that certain phases of the operation possessed merit, an organized plan of appraisal was instituted from an anatomic and pathologic as well as physiologic standpoint. A series of 71 cadavera were carefully dissected with especial attention to the collateral blood supply of the colon and rectum. The possibility of mobilization and "downswing" of the gut, and the pararectal musculature was carefully investigated before the operation was again performed on the living. As a result of these studies, in 1940 "proctosigmoidectomy" was added to our surgical armamentarium to combat rectal and sigmoidal carcinoma. The procedure has also been employed in the treatment of lymphogranulomatous stricture, endometrioma of the rectosigmoid and diverticulitis of the lower pelvic colon. A sufficient period has now elapsed to

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afford an opportunity to evaluate without bias various phases of this method.

In a large series of cases previously reported,[2, 3] it was shown that more than 80 per cent of carcinomata involving the anus, rectum and pelvic colon occur at a level of 8 centimeters above the anal margin. Further, the investigations of Westhues[4] and others,[5–10] give evidence that the lateral and especially the inferior zones of spread are almost nonexistent. In our group of cases, a recent survey of 87 consecutive postoperative bowel specimens sectioned serially at 2, 4 and 6 centimeters below the lower edge of the growth, disclosed that two or 2.3 per cent showed invasion at 2 cm., and one or 1.1 per cent showed invasion at 6 cm. below the growth.

Our work is based on a personal series of 480 patients with carcinoma of the rectum and pelvic colon.

CHART I

Cancer of Rectum and Pelvic Colon

Sigmoid	60	
Rectosigmoid	165	
Rectum	241	or 50.2 per cent
Anus	14	
TOTAL	480	

Of this number, 440 were operated upon, an operability rate of 91.6 per cent. Three hundred and ninety were resected, a resectability rate of 88 per cent based on the number operated upon, or 81.2 per cent based on the number of cases examined. The over-all mortality from resection employing several methods was 5.8 per cent (23 deaths). The technic of proctosigmoidectomy without colostomy was instituted for 251 patients; there were 15 deaths, a mortality of 5.9 per cent.

It is apparent that the procedure "proctosigmoidectomy" may be performed with a low mortality. Further, the method permits radical removal of the cancerous bowel and gland-bearing areas. Offered in evidence of this statement is our estimated rate of survival based on 81 patients in this series which slightly betters than parallels the results obtained by the more popular Miles type of abdominoperineal extirpation.

CHART II

Abdominoperineal Proctosigmoidectomy without Colostomy: Sphincter Muscle Preserved

Number of resections	251
Number of deaths	15
Mortality from resection	5.9%

CHART III

Survival
(Based on 81 cases)

Three year cures	58.6 per cent
Five year cures	50.2 per cent

Early advocates of the "pull-through" and circular suture method, particularly Hochenegg[11] and Koerbl[12] as well as Kocher,[13] DuPan,[14] Kraske,[15] and Gersuny,[16] cite degrees of continence following operation varying from 19.3 to 75 per cent. It is our honest opinion that even in 1940 and 1941, and in spite of constant change in technic, the degree of continence was never lower than 70 to 75 per cent. In an effort toward further improving continence, it has been found that the sphincter muscle bundles can be preserved adequately without division anteriorly or posteriorly and with minimal trauma to the musculature. Preservation of the anal epithelium as well as the almost normal contour of the aperture has also aided in obtaining the desired results. In our recent cases employing this modified technic, sphincter continence as estimated objectively and subjectively is appraised conservatively at 95 per cent of the normal.

The complications and sequelae of proctosigmoidectomy differ but little from those of other methods. Two instances of intestinal obstruction were encountered. In one case, the small

Fig. 1. After small intestines are displaced from operative field by means of packs, mobilization of sigmoid is begun. Left lateral peritoneal leaf has been incised to expose ureter. This incision is joined behind base of bladder by incision in mesial leaf of peritoneum. (All illustrations used in this article, courtesy of *Surgery, Gynecology and Obstetrics.)*

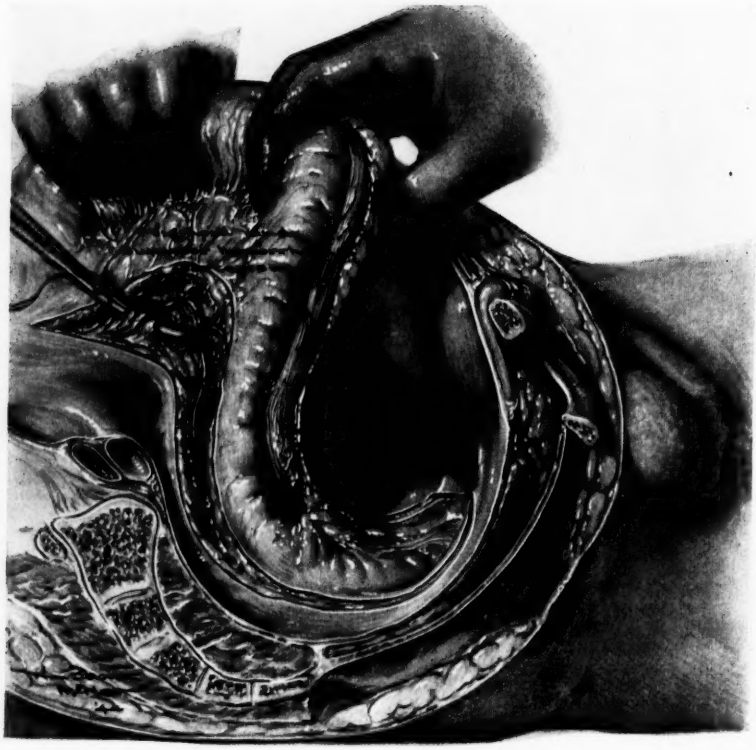

Fig. 2. Inferior mesenteric vessels are ligated at level of common iliac bifurcation. Thus, virtually all sigmoidal vessels and their arcades are preserved, and sufficient viable bowel is assured.

bowel descended and became fixed in the presacral space. The second occurred as the result of closing the anterolateral floor too snugly; this must always be avoided. Both were relieved surgically and made an uneventful recovery although one required a temporary proximal enterostomy. In another case, the left ureter became obstructed and necessitated operation. While utmost preoperative preparation and aftercare is essential, it would exceed the arbitrary limits of this paper to discuss such details, especially since these phases of the problem have been presented previously before this Society.[17] It should be mentioned that the morbidity has been extremely low. As reported,[18] patients are permitted out of bed usually on the sixth day (average 7.4 days in 69 consecutive cases) and discharged from the hospital usually on the eleventh postoperative day (average 13.6 days in same series). Patients usually return to work in 6 to 10 weeks following resection. In the 251 cases, abdominal wound infection occurred in two instances or 0.79 per cent. There were no wound disruptions. We attribute this favorable incidence of wound complications not simply to one, but to several factors which may be enumerated as follows: the oblique Babcock incision, the use of Babcock alloy steel wire, correction of hypoproteinemia, sulfonamide therapy (absorbable and non-absorbable), vitamin therapy.

CHART IV

Nitrogen Equilibrium
(Blood protein levels after operation)

With treatment (blood, plasma, amino acids)
In 103 patients, 83 (80.5%) had levels above 6.5 Gm. per 100 c.c.

Without treatment
In 17 patients, 2 (11.8%) had levels above 6.5 Gm. per 100 c.c.

It is worthy of mention that, following the Miles technic of abdominoperineal excision, impotence in the male is reported as 95 per cent.[19] Following proctosigmoidectomy, however, with anterior and posterior division of the sphincter muscles, the incidence of impotence was 55.5 per cent. In a smaller series without division of the sphincter musculature, the incidence of impotence was only 8.3 per cent.

TECHNIC

The abdominoperineal proctosigmoidectomy on our service is performed as follows: Under fractional spinal analgesia (employing 0.3 per cent pontocaine in 7 per cent dextrose solution), the abdomen is opened through a left oblique incision 3 centimeters above the inguinal ligament. The incision is begun at a point medial to the anterior iliac spine and ends to the right of the midline above the pubic spine. Ordinarily, the left anterior rectus sheath is divided. The liver is examined for metastasis; the median lumbar, upper and lower mesocolic areas palpated for nodules, and the extent of the growth determined. The patient is placed in the Trendelenburg position and the pelvic cavity is cleared of small intestine by hot packs. The left lateral leaf of the mesosigmoid is freely divided wide of any malignant infiltration, the incision being carried downward to the rectovesical or rectouterine sulcus. In the course of the dissection, the left ureter, the iliac and the spermatic or ovarian vessels are exposed. The spermatic or ovarian vessels may be divided and ligated. The sigmoid with attached fat and mesosigmoid is mobilized toward the midline. The peritoneum on the mesial side of the sigmoid is incised downward, continuing around the right pelvic brim and across the sulcus between the rectum and bladder or uterus to meet its fellow on the opposite side.

Ordinarily, transillumination is employed to visualize the inferior mesenteric superior hemorrhoidal and sigmoidal vessels and their communicating arcades. By such aid, greater precision can be exercised in preserving those vessels which are essential to that portion of the sigmoid reaching through the perineum. The necessary vessels are clamped, divided and doubly ligated. If desired, the lateral peritoneal leaf of the descending colon may be divided in order to slide the bowel to a lower position. Having determined the point of viability by observing pulsating arteries or by the character of the bleeding when the small vessels on the surface of the bowel at the level of resection are incised, it is identified with black silk. By gently inserting the hand into the postrectal cellular space in the pelvis, the lower pelvic sigmoid and rectum can be stripped from the anterior surface of the sacrum as far as the sacrococcygeal articulation. The lateral ligaments are rendered prominent and divided as far as the upper surface of the levator ani. They may or may not require ligation. Anteriorly, the rectum is separated in the female from the upper portion of the vagina, and in the male from the base of the bladder as far as the prostate. (Care should be exercised to avoid injury to the seminal vesicles and vas deferens.) Two and one-half grams of sulfathiazole powder are dusted over the viscera which are then covered by the great omentum. The peritoneum is closed. Interrupted sutures of 32 gauge alloy steel wire are introduced for closure of fascia, and 35 for the skin.

For the *perineal phase* the patient is changed to the lithotomy position and the rectum packed loosely with antiseptic gauze. The anal margin is retracted with Pennington clamps in four quadrants to render prominent the anorectal line and make taut the anal skin. By means of small scissors, a circular incision is carried through the thickness of the anal skin in a circular manner immediately below the anorectal line (pectinate line). It is important to preserve as much of the anal skin as is possible in order to establish a normal anal canal and aperture. The sphincter muscle is identified, "teased" aside and retracted in a manner similar to that used in our operation for hemorrhoids. Usually, a single transverse incision through the fascia propria, which is closely adherent to the periosteum of the lower border of the sacrum, is all that is needed to mobilize the rectum posteriorly. Pennington clamps are placed on the distal opening of the partially mobilized distal bowel. Traction on these clamps place both levator ani muscles on tension. The levators are clamped high, severed and ligated. Anteriorly, the superficial and deep transverse perineal muscles are retracted upward. Cautiously the line of cleavage between the rectum and prostate is followed until the seminal vesicles and base of the bladder come into view. In the female, the rectovaginal septum is separated by blunt and gauze dissection until the upper portion of the posterior wall and uterus are exposed. Mobilization being complete, the rectum and lower sigmoid are drawn through the wound and enclosed in a towel. The viable segment of bowel identified with black silk should prtrude well beyond the skin margin. An antero-lateral pelvic floor is established and the perineal and anterior sphincter muscles are permitted to assume their normal position. A curved, perforated, metal drain is inserted posteriorly along the sacrum to evacuate blood and serum during the first 48 hours. Dressings are applied; the extruding bowel is slit at the point of, or above, viability (5 to 7 centi-

Fig. 3. Mobilization of bowel posteriorly is accomplished by gentle but firm introduction of hand into presacral space as far as sacrococcygeal articulation. Anteriorly, recto-sigmoid is bluntly dissected from upper portion of vagina, or from prostate and seminal vesicles.

Fig. 4. Schematic drawing showing incision of both peritoneal leaves, *1* and *2*. From abdominal phase, rectum is shown mobilized anteriorly as far as prostate and seminal vesicles, *3*, or vagina and laterally to levators, *b*. From perineal phase of sigmoid, sphincter and transverse perineal muscles are divided anteriorly and preserved. Dissection is continued from *a* to *a'* to and through *b*.

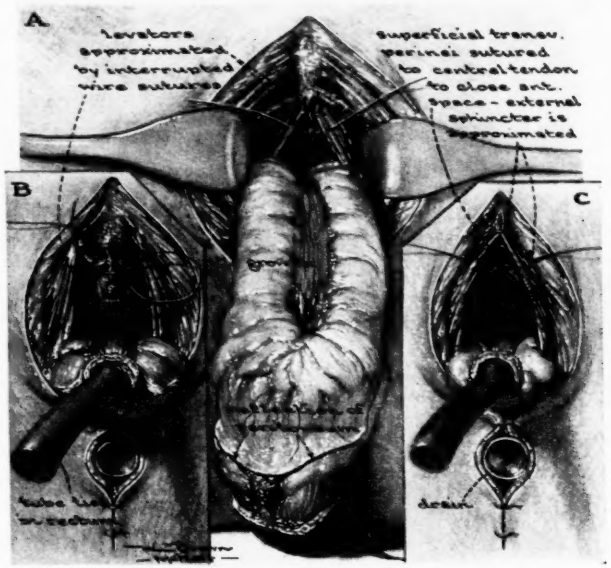
A
levators approximated by interrupted wire sutures
superficial transv. perinei sutured to central tendon to close ant. space - external sphincter is approximated
B
C

Fig. 5. *A*. Cancerous bowel drawn through wound; anterolateral floor has been established from peritoneal reflection. Approximation of anterior levator fibers is shown. *B*. Bowel has been cut away and rubber tube tied in sigmoid. Transverse perinei are sutured. *C*. Sphincter muscles sutured to original status.

meters) outside the anus to allow for retraction, and a 28 gauge rubber tube is placed and tied in the bowel. This rubber tube is removed after the first bowel movement—usually on the third postoperative day.

COMMENT

Although every effort is made to adapt the operation to the patient rather than the patient to the operation, it has been our experience that "proctosigmoidectomy" can and may be performed advantageously in a large group. This method is our preference for cases of carcinoma of the midrectum, rectosigmoid and lower pelvic colon. For malignant conditions of the anus or lesions of the rectum below 6 centimeters, a Miles resection is the procedure of choice. For cancerous involvement of the middle and upper sigmoid, an immediate end-to-end aseptic anastomosis with complimental appendicostomy is indicated.

SUMMARY

Half a million persons in the United States every year are afflicted with various types of malignant neoplasms. The author and his coworkers, have developed a technic for dealing with these growths, when they occur in the rectosigmoid, which they believe is superior in some respects to earlier types of resections, such as those of Lockhart-Mummery, Lahey and Miles. Their work is based on the pioneering of Babcock along very similar lines.

In this article, the author enumerates the particular advantages accruing to the patient upon whom this technic is used. He follows this with a detailed description of the operative technic and a few very brief suggestions regarding pre- and post-operative care. He also gives in tabular form the results, from various angles, of a series of cases which have passed through his hands in the past few years.

RÉSUMÉ

Chaque année, un demi-million de personnes aux Etats-Unis son affligées de néoplasmes malins. L'auteur et ses collaborateurs ont développé une technique pour le traitemente des tumeurs malignes qui intéressent la région rectosigmoïde. D'après eux aux autres méthodes de résection, telles celles préconisaient par Lockhart-Mummery, Lahey et Miles. Leur méthode est basée en partie sur les recherches de Babcock.

Dans cet article l'auteur enumère les avantages pour le malade de l'emploi de cette technique. Il donne une description detaillée de cette technique opératoire et quelques suggestions tres brèves, se rapportant aux soins pré- et post-opératoires. Il nous donne les résultats qu'il a obtenus par l'emploi dans ces cas de cette méthodes, pendant les quelques dernières années.

Свод

Ежегодно полмиллиона человек в Соединенных Штатах поражены разными злокачественными опухолями. Автор и его сотрудники развили оперативную технику таких опухолей, случающихся в ректо-сигмоидальной кишке. Они думают, что эта техника лучше, чем более ранние типы резекции по методам Lockhart-Mummery и Miles. Их работа основана на пионерном труде Babcock'a в этом направлении.

В статье автор перечисляет особенные преимущества их методики для оперированных больных. Затем он дает детальное описание оперативной техники и несколько кратких советов о до- и послеоперационного ухода. Он также дает таблицы результатов серии случаев, которые прошли через его руки в течение нескольких лет, обсуждая их с разных точек зрения.

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Transplantation of the Ureters to the Bowel

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TRANSPLANTATION of the ureters to the bowel, transforming the separated functions of urinary and fecal elimination to an artificial cloaca, has intrigued surgeons ever since the monumental experimental work of Coffey, Mayo and others. The several methods that have since been devised by others to accomplish this result show that no one method has as yet proven completely satisfactory. Heretofore, the attempts have been carried out transperitoneally; the hazards of this approach have been thoroughly recognized by those men who have attempted this surgical procedure. The results have been very unsatisfactory from the standpoint of mortality and morbidity. Mortality among my own cases in the transperitoneal approach was over 50 per cent. This caused me (and many others) to abandon this procedure except in those cases where death itself was preferable to the patient to life with the existing clinical condition.

There are many modifications of the original technic offered by Coffey; even Coffey himself had modified and remodified his original technic. All procedures since devised have as their fundamental principles those advocated by him when he first reported the results of his experimental and clinical work in 1911. However, in the hands of most of us, these transperitoneal procedures carried with them great dangers both immediate and remote. The heavy mortality in my own cases was due to peritonitis, ileus, intestinal obstruction, rapid fulminating pyelonephritis and ureteral obstruction, with or without infection, causing hydronephrosis and renal parenchymal destruction.

In 1935, I devised an extraperitoneal modification of the operation and reported the technic in 1942, as a motion picture, at the American Urological Association meeting in New York. On the same program, Priestley of the Mayo Clinic read a paper upon almost the identical technic as developed at the Mayo Clinic by himself. Counsellor of the same Clinic does a similar operation. Both of these presentations were given without either of us knowing of the similarity of our work. The technic of our operations was virtually identical; Counsellor likes some of the minor things I do better than his own while I like some of the minor things he does better than mine. We have discussed the similarity of our original thinking and both of us have so modified our own technics that the operation we do today is practically the same.

INDICATIONS

1. Cancer of the urinary bladder, urethra and vagina. There are certain types of cancer of the bladder where I now believe that bilateral transplantation of the ureters to the bowel, with total cystectomy, is definitely indicated. These are the cancers of the urinary bladder which, because of their location and size, can not be treated cystoscopically; where the bladder is freely

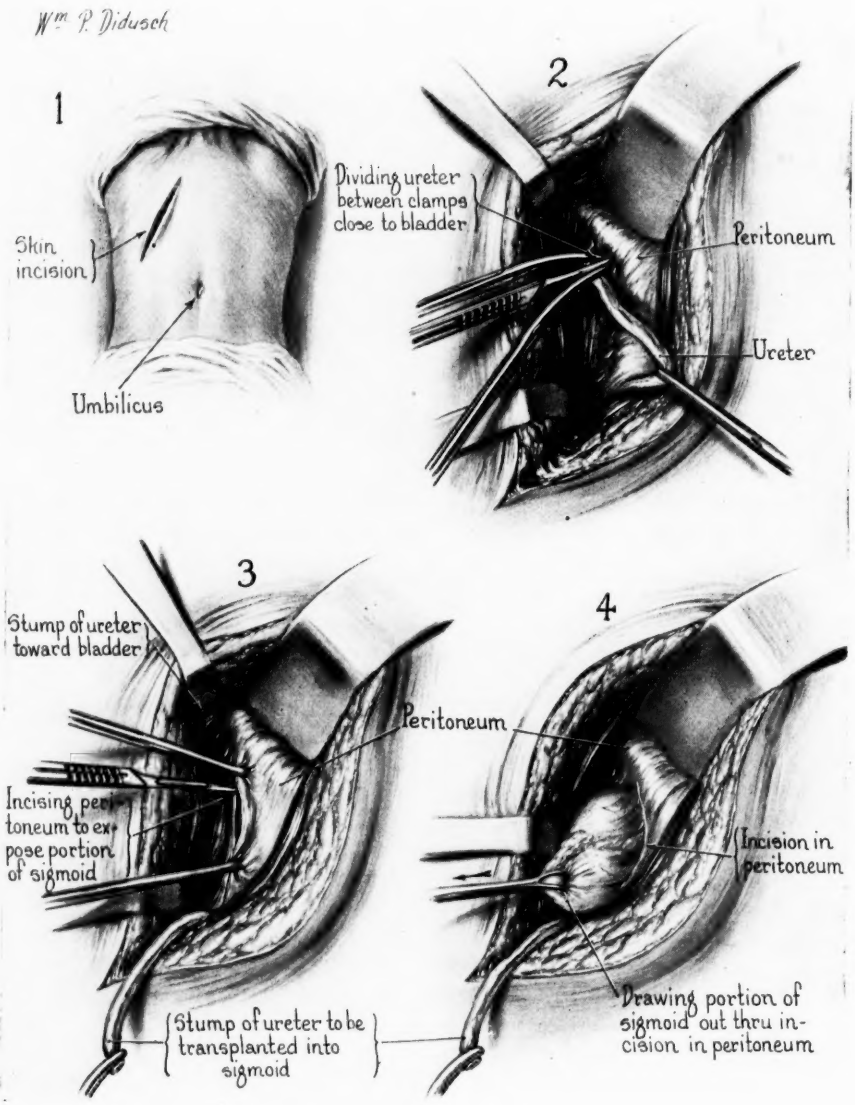

Fig. 1

movable, and where there is no direct evidence of bladder wall fixation to the underlying tissue or of metastasis. Occasionally, the operation is indicated in primary carcinoma in the urethra of the female where there has been extension to the base of the bladder and to the anterior wall of the vagina. In these cases, total cystectomy with removal of the anterior wall of the vagina and urethra is definitely indicated; if it is feasible to transplant the ureters, again there should be no direct evidence of glandular metastasis.

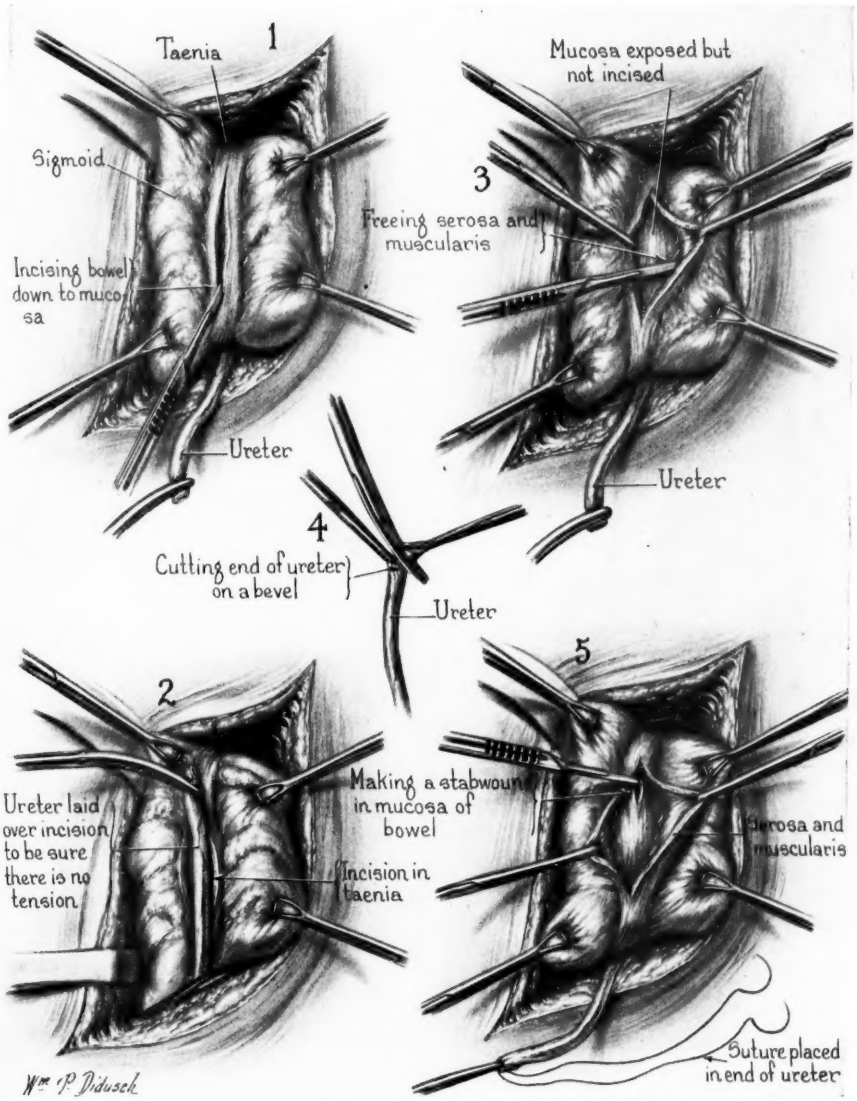

Fig. 2

2. In certain types of inoperable vesicovaginal fistula, the operation is definitely indicated, particularly if there has been no upper urinary tract obstruction due to stricture-formation just above or at the intramural portion of the ureter. I have done the operation on several cases of vesicovaginal fistula that were absolutely impossible to correct by local operative procedures. On several occasions the cause of the fistulae was a radium reaction, usually following the treatment of cervical carcinoma. (These are the most difficult to close.)

3. Interstitial cystitis is to me a very interesting pathological entity. I am satisfied that a great many men are using the term "interstitial cystitis" as a description of the so-called Hunner's ulcer plus other types of intramural inflammatory conditions of the bladder. My own interpretation of the term "interstitial cystitis" is the pathological entity described as Hunner's ulcer. I can truthfully say that I have never been able to cure a real Hunner's ulcer by local bladder treatment. I have, however, transplanted the ureters in a number of these cases, with complete symptomatic relief for the patient. It is my belief that if after a thorough attempt has been made to relieve the patient suffering with a Hunner's ulcer of his or her symptoms, transplantation of the ureters is definitely indicated.

4. The cases of so-called contracted bladder, usually secondary to healed tuberculous cystitis or other type of contracted bladder due to infection which has extended to and involved the muscular wall of the bladder, are ordinarily caused by a previous interstitial cystitis. These cases are not Hunner's ulcer and should not be so classified. We have had several cases of contracted bladder following removal of a tuberculous kidney and the healing of a tuberculous cystitis. These patients usually have as much frequency and urgency as they had with their active tuberculous infection. Some of these bladders have contracted down so that they will hold only an ounce or less of urine and the patient is in constant misery. If there is no overdilatation of the ureter of the remaining good kidney, it should be transplanted into the bowel. If hydro-ureter has taken place, it may be necessary to transplant it to the abdominal surface. There are several other cases where we have transplanted both ureters for a healed infection of the bladder where the fibrosis has been definitely due to a pyogenic infection; in these cases if there has been no dilatation of the ureters, I have unhesitatingly transplanted the ureters into the bowel, with complete relief of symptoms.

5. One of the largest groups of cases where this operation is definitely indicated, is in those lower genital tract anomalies commonly classified as exstrophies of the bladder, with imperfect formation of the external genitalia in either the male or female. There is no operation that gives so much relief to these sufferers as does bilateral transplantation of the ureters into the bowel. As soon as the anomaly is discovered in an infant, plans should be made to operate on the child at the earliest possible moment. Lower of the Cleveland Clinic advocates the operation during the first few months of life; so do I. During the past year, I have operated on one male child two months old and a seven-year-old girl, with perfect results. Of course, the transplantation of the ureters is only the first part of the plastic surgery that must be contemplated later, to correct, as far as possible, the defect in the lower abdominal wall and in the external genitalia. These procedures may be postponed until at or near the age of puberty.

6. There are a few isolated conditions where complete urinary incontinence persists and where the anal sphincter is properly innervated and competent. In these cases, complete relief of the constant annoyance of dribbling can be accomplished by transplanting the ureters into the bowel. This has been done in two cases where injury to the vesical sphincter was accompanied by complete incontinence and where the anal sphincter was intact.

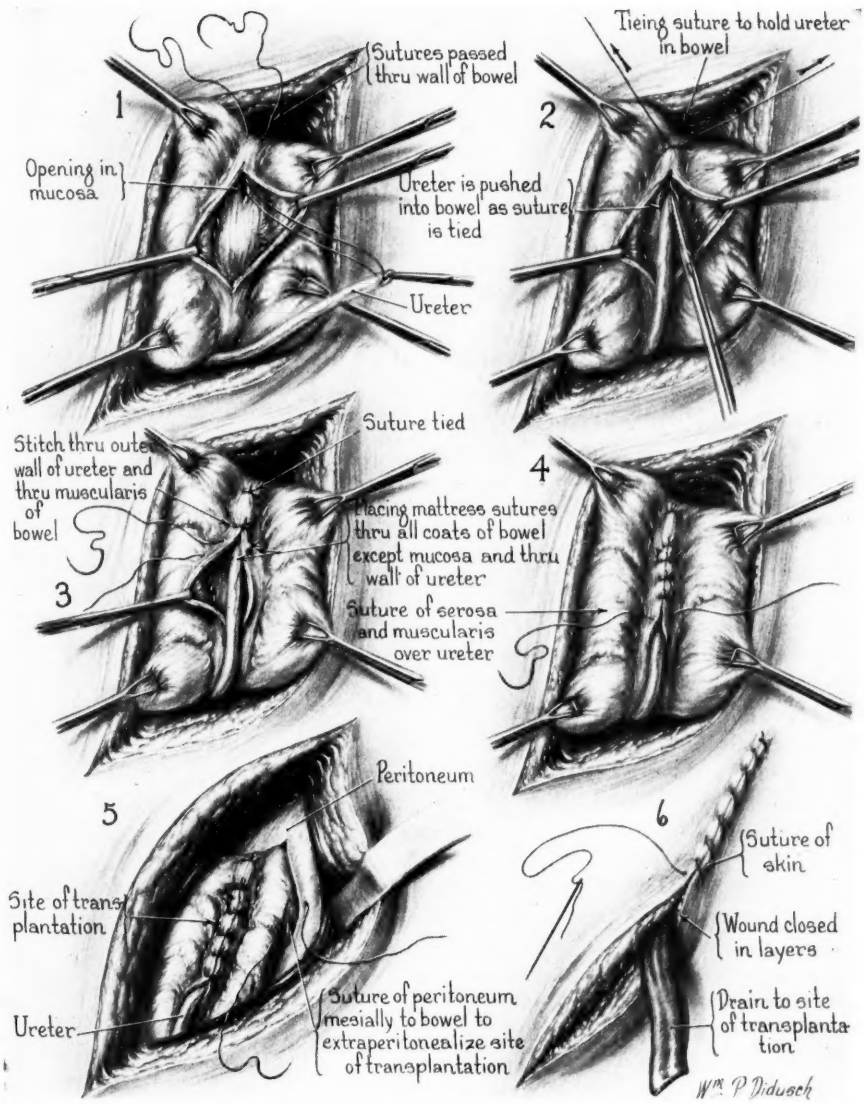
1
Sutures passed thru wall of bowel
Opening in mucosa
Ureter is pushed into bowel as suture is tied
Ureter
2
Tieing suture to hold ureter in bowel
3
Stitch thru outer wall of ureter and thru muscularis of bowel
Suture tied
Placing mattress sutures thru all coats of bowel except mucosa and thru wall of ureter
Suture of serosa and muscularis over ureter
4
5
Peritoneum
Site of transplantation
Ureter
Suture of peritoneum mesially to bowel to extraperitonealize site of transplantation
6
Suture of skin
Wound closed in layers
Drain to site of transplantation
Wm. P. Didusch

Fig. 3

In all, I have done the operation for the above indications 28 times, without a single death. The only complication was that in two cases, due probably to the improper tying of a suture, the ureter was strictured where it entered the bowel. In these two cases it was necessary to do a nephrectomy on the same side, although the other ureter functioned perfectly and the rectum remained a satisfactory reservoir for the patient.

There are a few cases of cancer of the bladder which are considered in-

operable and in which transplanting the ureters will give relief of symptoms where a total cystectomy is impossible. There have been three patients with an inoperable carcinoma of the bladder in which the ureters were transplanted into the rectum; the rectum acted as a satis factory reservoir and the patients were relieved of their dysuria and strangury. Although they died of their disease within two years, they lived fairly comfortable lives in the meantime.

Today I think no more of transplanting the ureters than the average surgeon would about taking out an appendix. The technic is herewith described and illustrated.

TECHNIC OF THE OPERATION

First, the operation of transplanting the ureters is usually done in two stages. The right ureter is transplanted first, as a rule; the left ten days to three weeks later. At the time that the left ureter is transplanted, if a total cystectomy is contemplated, it may be done at the second operation providing the patient's condition warrants the additional surgery. In the case of exstrophy of the bladder, these conditions are usually left till months or years later before their correction is attempted. In the case of inoperable carcinoma and interstitial cystitis, no attempt is made to remove the bladder because the symptoms are completely relieved as soon as the urinary bladder is put at complete rest. Occasionally, in vesicovaginal fistulae it is better to remove the bladder, but most of these cases can be left alone and are cared for by a proper vaginal toilet.

A gridiron incision is made in the right hypogastrium, the transversalis fascia is incised, the peritoneum is retracted and the ureter, where it crosses the large vessels of the pelvis, is picked up with Babcock forceps. The ureter is then freed by blunt dissection from the peritoneum down to the bladder wall, doubly clamped and severed. The distal portion is ligated and dropped back. No attempt is made to strip it of the periureteric areolar tissue. This is very important as there is less chance for the ureter to slough if its surrounding areolar tissue is not disturbed. The ureter is then wrapped in gauze, saturated with warm saline, and brought out at the upper angle of the wound. The lateral peritoneum is now picked up with a hemostat and an incision from one to one-and-one-half inches long is made in the peritoneum. The lower sigmoid is then fished out with a sponge forceps. If because of adhesions or other anatomical difficulties, the sigmoid can not be drawn into the wound, the cecum may be used. I have deliberately used the cecum twice, with very splendid results. If the cecum is used, an appendectomy is done to prevent a mechanical appendicitis from developing from the accumulation of urine in the cecum after the anastomosis has been made. After the bowel is exposed and fixed with four Babcock forceps, an incision is made through all the coats of the bowel except the mucosa for about one-and-one-half inches; the muscularis is dissected off the mucosa so that there is a definite trough made in the wall of the bowel. The ureter is now grasped with two hemostats and cut obliquely across its lumen. A No. 1 Luken's, with two needles, is inserted through the lumen of the ureter and out through all of its walls. The tip of the ureter is grasped with a hemostat. After thoroughly packing off the bowel, the mucosa at the distal end of the incision in the bowel is pierced and one of the needles connected with the Luken's through the ureter is inserted into the lumen of the

bowel, distally, and brought out through all coats of the bowel, about one-half inch below the opening in the lumen. Then the other needle on the other end of the same Luken's is inserted through the opening in the mucosa and brought out about one-half inch, again through all coats of the bowel, the suture being separated from the first one by about one-eighth of an inch. While an assistant pulls on these two strands of gut, the operator picks up the hemostat grasping the tip of the ureter and inserts the ureter through the opening in the mucosa and the suture is tied on the outside of the bowel, the knot being about one-half inch below the distal end of the bowel incision. This leaves a good half inch of ureter lying within the lumen of the bowel. Then another suture of Luken's goes through all coats of the bowel, except the mucosa, the muscularis of the ureter, and through all coats of the bowel except the mucosa on the opposite side. Then on the right-hand side of the incision a mattress suture goes through all coats of the bowel but the mucosa, laterally through the wall of the ureter, and out through all coats of the bowel excepting the mucosa at the extreme distal end of the bowel incision. This same suture is repeated on the opposite side of the incision. Then these three sutures are tied. As these sutures are tied, the lumen of the ureter is held open at the point where it dips through the mucosa into the lumen of the bowel. The ureter now lies in a trough, with its distal end in the bowel; the muscularis of both sides of the incision is closed over the ureter from the distal end of the incision to the proximal end. The last suture placed must be loosely tied so as not to constrict the lumen of the ureter where it enters the prepared bed in the wall of the bowel. The peritoneum is now grasped and a single suture is placed in the outer portion of the peritoneum and is stitched to the mesial side of the sigmoid or cecum and tied. This extraperitonealizes the site of the anastomosis, and the bowel, at the site of the anastomosis, is now rolled into the pelvis so that the ureter and the site of the anastomosis lie in the pelvis extraperitoneally against the pelvic wall. Sulfathiazole is dusted into the wound, a Penrose drain without a fill is placed down to the bladder, and the incision is closed according to the desires of the operator. Exactly the same technic is carried out on the left side ten days to three weeks later.

The postoperative care consists of keeping the patient on a non-residue diet, with plenty of fluids and sulfaguanidine. A rectal tube is placed in the bowel and permitted to remain for from five to eight days until the urinary flow into the bowel has been thoroughly established. If the rectal tube becomes clogged, it must be lavaged and kept open or it must be removed and replaced.

CONCLUSIONS

The indications for transplantation of the ureters into the bowel are very definite. A simple technic for extraperitoneal transplantation of the ureters is described which has been performed 28 times without a single death. Twice there have been strictures of the ureter where it enters the wall of the bowel, due probably to tying the last ligature too tightly, requiring nephrectomy. The technic of the operation is simple and the results are good.

CONCLUSIONS

La transplantation des uretères a des indications précises. Une technique simple pour la transplantation extrapéritonéale des uretères est décrite.

Vingt-huit malades furent soumis à cette opération. Il n'y eut aucun déces. Deux fois, il y eut étranglement de l'urétère a son entrée dans l'intestin, accident probablement dû à ce que la dernière ligature fut trop serrée. Il fallut pratiquer la néphrectomie dans ces deux cas. La technique de l'operation est facile et les résultats sont bons.

RESUMEN

Quedan bien definidas las indicaciones para la transplantación de los uréteres dentro del intestino. Se describe una simple técnica para la transplantación extraperitoneal de los uréteres, puesta en práctica 28 veces sin un sólo caso de defunción. Se presentaron dos casos de estrechez uretral en la entrada de la pared del intestino, debido, probablemente, a que al atar la última ligadura demasiado estrechamente se produjo refrectomía. La técnica de operación es fácil y los resultados buenos.

Заключения

Показания на трансплантацию мочеточников в кишку очень определенные. Описана простая техника внеперитонеальной трансплантации мочеточников, которая была применена 28 раз без смертельного исхода. Два раза случилась стриктура мочечника у входа в стенку кишки, по всей вероятности причиненная слишком тугим последним швом. Необходимо было произвести нефректомию. Оперативная техника простая и результаты хороши.

CANDIDATES TO RECEIVE THEIR DEGREES AT THE CONVOCATION IN DETROIT TO TAKE PLACE DURING THE ELEVENTH NATIONAL ASSEMBLY OF THE UNITED STATES CHAPTER OF THE INTERNATIONAL COLLEGE OF SURGEONS ARE URGED TO COMMUNICATE IMMEDIATELY WITH

DR. L. J. GARIEPY, General Chairman
16401 Grand River Avenue
Detroit, Michigan;

ALSO, IF HOTEL RESERVATIONS HAVE NOT BEEN SECURED, TO CONTACT

DR. CHARLES W. HUSBAND, Chairman Housing Committee
1005 Stroh Building
Detroit, Michigan.

Experiments with "Cuto-Omentopexy" and Skin Homotransplantation*

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AND
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JERUSALEM, PALESTINE

I

THERE is no doubt that in the case of hepatic cirrhosis, renal hypertension or coronary insufficiency, a collateral derivative circulation can be established by means of omentopexy, relieving congestion in the hepatic parenchyma (Talma and Van der Meulen, 1889, and Rutherford Morison, 1896) and, in the case of coronary insufficiency, improving the blood supply to the cardiac muscle (Beck, C. S., 1930; Beck, C. S., and Tichy, V. L., 1935, and O'Shaugnessy, 1935).

It has now been tried to apply the principle underlying omentopexy to skin transplantations (full thickness grafts). The idea was to interpose a layer of extraperitonealized omentum—either pedunculated or free—between the transplanted skin and the wound. Thus it was hoped to create conditions most favorable for the vascularization of the transplants, which is one of the decisive factors for the success of the operation (Harwey B. Stone, 1934; E. C. Padget, 1942; I. E. Sheehan, 1943, and F. Young, 1944). Another question was whether by the help of this method it would be possible to perform true homotransplantation of skin grafts.

In this, the first part of our study, an account is given of our preliminary experiments and the manner described in which contact was established between the extraperitonealized omentum and the skin. Further the time required was ascertained for the establishment of the vascular connections.

EXPERIMENTS

Twenty-six rabbits from different sources and of approximately the same size and weight were used. Under ether anesthesia median superior laparatomy was performed. The incision was about 3 cm. long. Upon opening the peritoneum, the omentum was grasped and exteriorized at the lower angle of the wound. The peritoneum and muscles were closed in two separate layers. The skin was dissected from the subcutaneous fat tissue so as to form a pocket with sides 3 cm. long. The omentum was placed into this pocket and fixed to its corners by separate sutures. Finally compression and a sterile dressing was applied.

After 3, 7, 14 and 21 days respectively the skin was excised together with its omental lining and examined histologically.

In six further experiments, the omentum placed into the pocket consisted not of a pedunculated but of a free flap. The technic of the operation was the same as in the first series.

RESULTS

Gross Aspects: At the site of the extraperitonealized omentum a mammelioned elevation was observed. The skin underneath remained normal as to color, hair and con-

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sistency. Three days later, the skin with its omental lining already gave the feeling of a continuous mass to the palpating finger. Examination of the excised skin after this period showed that the skin was everywhere firmly attached to its omental lining. The extraperitonealized omentum gradually changed its aspect, becoming hardened and traversed by numerous fibrous bands.

To the naked eye the aspect was the same where free, non-pedunculated omentum had been used.

Microscopy: A short time after extraperitonealization, the omental tissue had undergone a number of important changes. The fatty elements of the omentum had become reduced in number while connective tissue and vascular elements prevailed in an increasing measure.

In the 3-day transplants—the first to be examined—the septa of the connective tissue forming the omental framework, were found to be broadened. Thick, white bands traversed the omental transplant in all directions dividing the primordial fat lobules into several unequal parts. These bands were either composed of spindle-shaped or stellate connective cells accompanied by collageneous fibres. The connective tissue of septal origin showed an extremely rich vascular supply. Among the connective cells and the collageneous fibres young capillaries were found, sometimes wide, sometimes extremely narrow, forming a thick network.

The newly-formed, richly vascularized tissue had thus acquired many of the characteristic features of granulation tissue uniformly extending and infiltrating the original fat tissue. In addition this newly formed tissue contained a considerable number of eosinophilic polynuclears, small lymphocytes and long cells of the macrophage-type full of pigment. The connective cells of the adventitia of the vessels traversing the fatty tissue, showed proliferation and joined the connective-tissue bands of septal origin.

Parallel with the proliferative process just described, there was also involution of the fatty tissue, which followed the typical pattern of progressive disappearance of the intra-cellular fat and reduction in the size of the corresponding cells, formation of multinuclear crescent-shaped cells and appearance in increasing numbers—among the remaining fat cells of small, lipoid-filled histiocytes obviously deriving from the latter (fig. 1). The newly-formed histiocytes joined the connective elements of septal origin, and the neo-formed tissue, which gradually replaced the omental tissue, obviously bore the mark of this double origin.

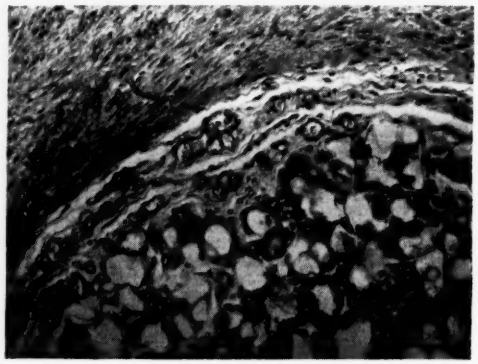

Fig. 1. Transformation undergone by omental fat, three days after omental extraperitonialization and perfect union between omentum and skin.

As a result of this process the extraperitionealized omentum had, a fortnight after its transplantation, assumed an entirely different aspect. The fatty tissue had completely disappeared over large areas and was reduced to small isolated islets. The greater part of the omentum was replaced by connective tissue, which, to begin with, contained numerous capillaries resembling a granulation tissue, while later abundant collageneous fibres developed lending the tissue a distinctly fibrous aspect.

The border between the extraperitonealized omentum and the deep layers of the derma three days after the operation was already almost indistinguishable. At that time the union between the omentum and the deep layers of the skin was nearly complete. The elements of the transformed omentum invaded the skin and here and there penetrated the basic layer of the epidermis. The newly-formed capillaries accompanied by non-differentiated mesenchymal cells and spindle-shaped connective-tissue cells formed

the frontline of the invasion. This penetration (fig. 2) occurred in the way of tongues whose framework was composed of young fibroblasts and fine collageneous fibres. The framework also contained a well-developed net of capillaries in different stages of development. The capillaries were here and there distended and engorged: frequently they contained large macrophages filled with lipoids (fig. 3).

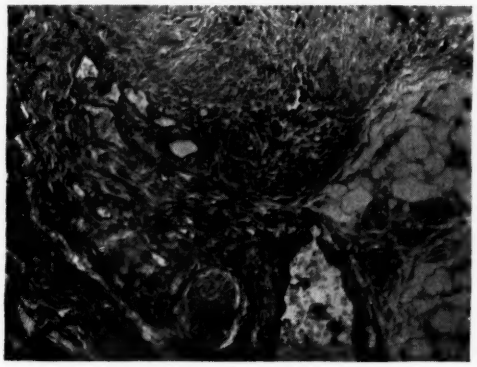

Fig. 2. Invasion of skin by underlying omentum. Newly-formed capillaries accompanied by new, differentiated mesenchymal cells and spindle-like connective tissue cells form front line of invasion.

Seven days after operation there was not only penetration of capillaries from the omentum into the derma (figs. 4 and 5), but a considerable number of small vessels—arterioles and venules—had developed, whose course could be precisely followed up from their omental origin to the deep stratum of the epidermis. The vascular structures accompanied by connective tissue traversed the derma in an increasing measure and penetrated, along the sebaceous glands and hair follicles, to the base of the epidermis, forming, with the elements of the derma, a perfectly-welded dermo-omental block (fig. 6).

The transformation noted in omental grafts freely transplanted under the skin was essentially the same as that observed in the pedunculated omentum, the sole difference being considerable lymphocytic infiltration around the vessels and within the newly-formed granulation-like tissue.

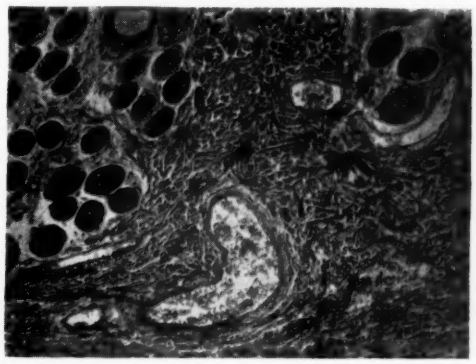

Fig. 3. Capillaries at border line between skin and omentum are expanded and engorged.

COMMENT

From the experiments outlined above it appears that extraperitonealized pedunculated omental flaps as well as

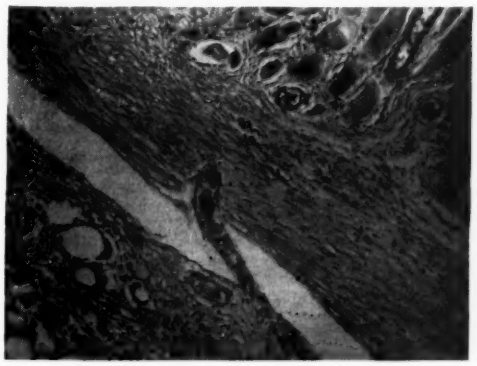

Fig. 4. Capillary penetrating from omental lining into skin.

omentum freely grafted under the skin unite very intensively with the latter. Richly developed capillary nets as well as small arterioles penetrate from the omentum deeply into the derma and reach the basis of the epidermis. Our

observations are limited to a period of three weeks only and the question of the further fate of this vascularization remains open. The fact that the transplanted omentum gradually changes into fibrous tissue gives reason to doubt the permanency of the newly-established vascularization.

SUMMARY

(1) Intense vascularization of the skin was established by transplanting pedunculated or free omental grafts under the skin.

(2) The histological follow-up of the changes undergone by the extraperitonealized omentum and of the manner in which the vascularization is produced, is described.

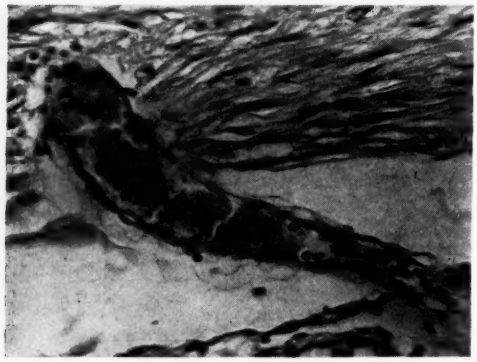

Fig. 5. Same as Fig. 4, magnified.

II

In the first part of this paper it has been shown that the vessels of the extraperitonealized omentum introduced underneath the skin penetrate deeply into the derma thus considerably improving its blood supply. In the second part of our report the question is dealt with as to whether it is possible to effect a transplantation from one animal to another of these extremely vascularized skin flaps and to transfer them on a wound bed previously covered with omentum. The object of these experiments was to find out whether by creating conditions ensuring optimal vascularization of the transplants, homotransplantation is possible.

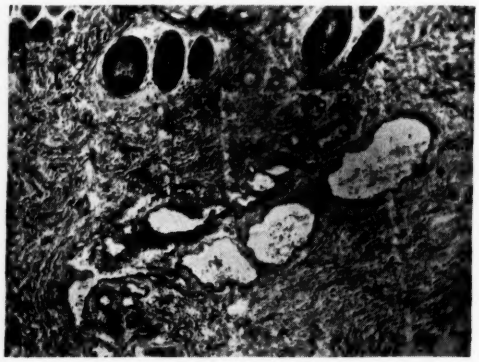

Fig. 6. Vascular elements accompanied by connective tissue traverse derma increasingly forming, with its elements, a perfectly welded dermo-omental block.

MATERIAL

Twenty-four rabbits of an average weight of 2 kilos were used in these experiments. They were taken from different sources.

EXPERIMENTAL SET-UP

On two rabbits extraperitonealization of the omentum and its transposition under the skin was performed. The same method as described in the first part of this report was used. A fortnight after the operation—the time when the maximum vascularization of the skin by means of the vessels of the underlying omentum was taking place—the skin covering the omentum was dissected from its lining and excised. The excised skin flaps of both animals were exchanged and then with separate sutures fixed to the omentum-covered wound beds of the corresponding rabbits. For the purpose of control, simple, full-thick skin grafts of the same size as the cuto-omental grafts were exchanged simul-

taneously on the corresponding rabbits. A compressive bandage was then applied covered by a second bandage of plaster-of-paris. The appearance of the transplant was followed-up at intervals of 24 hours. After 3, 6, 10, 14 and 21 days respectively the skin grafts were dissected off and examined histologically.

RESULTS

Our observations show no difference, either as to the development of the changes in the transplants or as to the final results, between the transplants of skin vascularized by union with the omentum and the simple skin grafts.

To the naked eye, the first changes in both kinds of grafts appeared after three days, consisting in a changed consistency and color of the graft generally with onset at the periphery, very rarely in the central part of the graft.

The grafts began to harden at the periphery and a light-brown marginal zone formed of 2–3 mm. width. At that time the central part of the graft was, as a rule, soft, elastic, offering a moist, smooth, velvety surface. Its color was sometimes pink, but more usually a grayish green. In the latter case the grafts conveyed, on palpation, a sensation of fluctuation. The hairs were atrophied disappearing towards the periphery, but persisting in the central zone of the graft.

By the sixth day, the marginal zone had become wider, and isolated spots of a grayish-green color began to appear in the central parts.

From the sixth up to the fourteenth day, the color of the graft changed from a grayish green to black; it grew hard and inelastic. The graft surface became rough, irregular, sometimes undulating, with deep crevices. The raised edges turned up and lost contact with the bed to which they had been attached. Underneath the upturned edges of the disintegrating skin graft a dark red margin of epithelization emerged originating from the edges of the graft bed.

From the fourteenth to the twenty-first day, the process of disintegration of the skin graft continued. The crevices furrowing the surface of the graft became accentuated and widened. The graft was now divided into several isolated portions with an irregular surface of a dirty-gray or brick-red color without any definite pattern. On the whole, the appearance was that of a crust which contracts, disintegrates and is cast off, exposing a granulated surface.

On 3 out of 24 animals, the disintegration of the graft took a different course. There was no crumbling and gradual shedding of the necrozed skin of the transplant. The latter was turned into a uniformly mummified crust that remained solidly attached to the transplantation bed. When it came away, it was found that the entire reparative process had taken place *under* its cover.

The epithelization process commences at the periphery and progresses towards the center of the bed, which is the last part to heal.

Microscopically, three days after transplantation, the epithelial cells of the epidermis were partly edematous with pyknotic nuclei and voluminous cytoplasm. The subepithelial layer displayed no evident changes except for a moderate degree of infiltration by lymphocytes and macrophages. Between the graft and its omental bed a zone consisting of well developed collagenous fibres with a few connective-tissue cells and a number of newly-formed capillaries was observed.

Between the sixth and ninth day, the connective-tissue constituents of the skin graft were in a state of disintegra-

tion. The epidermis had become thinner and was transformed in a hyaline-like ribbon completely devoid of cellular elements. Here and there the epidermis showed a tendency to detach itself from the underlying tissue and a wide space separated it from the dermic papillae. The follicular acini were generally better preserved. At the base of the graft, there was marked lymphocytic infiltration, the lymphocytes showing intensive pyknotic changes.

Examinations made between the fourteenth and twenty-first day showed that the grafts had completely disintegrated and formed a compact mass in which no structure could be distinguished; they were separated from their omental beds by a space partially filled by an amorphous mass completely lacking in cellular or vascular elements. Simultaneously with the process of disintegration, regeneration of the epithelial layer from the edges of the skin defect was noted, underneath the disintegrated graft and also independent of it. Lymphocytic infiltration disappeared progressively and remained only in the vicinity of the large vessels.

Epithelization advanced rapidly and after three weeks the surface of the old graft bed was completely covered with a continuous, newly-formed epithelial layer.

SUMMARY

(1) Two types of skin homografts were made on the same animal. The skin of a rabbit was grafted on another rabbit, an omental layer being interposed between the wound bed and the skin graft. For control, a simple skin-homograft was also performed on the same animal.

(2) Both grafts with and without omental lining did not take and disintegrated in a period varying from 2–3 weeks.

(3) From the experiment it appears *that by increasing vascularization of the skin the taking of skin homotransplants cannot be enhanced.*

We are very grateful to Dr. Doljansky, head of the Institute for Experimental Pathology, for the help extended to us.

SUMMARY

In a two-part article, the author summarizes the results of his work upon experimental animals with skin grafts underlaid with sections of omentum. In Part I, he describes results obtained when skin and omentum were both from the animal upon which the work was done. In Part II, he tells of efforts to exchange grafts by the same methods from one animal to another. In the first set of experiments, results were good; in the second, the grafts failed completely.

SOMMAIRE

Dans un article en deux parties, l'auteur résume les résultats do son travail sur des animaux de laboratoire, avec des greffons cutané placés audessus de sections d'epiploon. Dans la prémière partie, il décrit les résultats obtenus quand la peau et l'epiploon furent pris sur l'animal même sur lequel il a opéré. Dans ces cas, les résultats furent bons. Dans la seconde partie, il essaya de transférer des greffons par la même technique d'un animal à un autre animal. Dans ces cas, tous les résultats échouérent complètement.

RESUMEN

En un artículo dividido en dos partes, el autor resume los resultados de su trabajo en injertos de piel reforzados con secciones de omento. Los trabajos se llevaron a cabo por medio de animales.

(Continued on page 535)

A Simple, Thorough Operative Technic for Excochleation of Disc Herniation

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MY personal experience with disc herniation operations is thus far not extensive. I have, nevertheless, noticed that a complete excochleation of a herniated disc may involve certain technical difficulties which tend to prolong, unnecessarily, the operation in its most important phase, i.e., during the evacuation of the protrusion. These disturbing factors present, in the main, three problems; to solve the technic of these problems correctly and expediently is to shorten considerably the operating time and to facilitate the complete removal of the "prolapsed tumor".

I. How should the nerve root or roots be dealt with in order that, while the protrusion is being excochleated, they should be retained, as nearly as possible, in an anatomically and topographically favorable and sheltered position?

II. Is it possible to avoid completely, or to render negligible, mechanical injury to the nerve roots or the veins situated on the surface of the protrusion? The latter often form, especially on the surface of the protrusion, plexus-like venous dilatations. How also may one avoid the troublesome, occasionally even unexpectedly profuse hemorrhage caused by rupture of these varicosed veins, the management of which tends to lengthen the carrying out of the most important phase of the operation?

III. In what manner should a thorough excochleation of the prolapsed tumor be performed in order to preclude the formation of a possible later recurrent tumor?

I am fully aware that the foregoing questions have already received due attention in the literature. As I have, however, relatively little French and Anglo-American literature at my disposal, I am at a disadvantage when seeking a satisfactory answer to these questions. I therefore venture to present, in the following, my so far comparatively scanty experiences even at the risk that the questions taken up have been solved elsewhere along the same lines as those that will now be discussed. If this is the case it only shows that the same technical problems have been occupying the minds of other surgeons, and I am only too pleased if they have been led, through their solutions, to similar measures to those that I have found justifiable.

In a couple of publications which have been issued recently, procedures of a similar type to those discussed in the present paper have been mentioned briefly, either directly or indirectly.[1]

I. In the cases treated by me, the topographic location of the nerve root or roots has been such that they have, with their dura mater pockets, along with the growth of the protrusion, been moved over to its lateral side, or "ride" on the protrusion itself. In the most favorable cases, they are situated close to the dural sac on the medial side of the protrusion.

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In only a couple of cases have I encountered a removal of the protrusion to the lateral side. The varying localization of the nerve roots naturally depends on the point where the protrusion originates and in what direction it

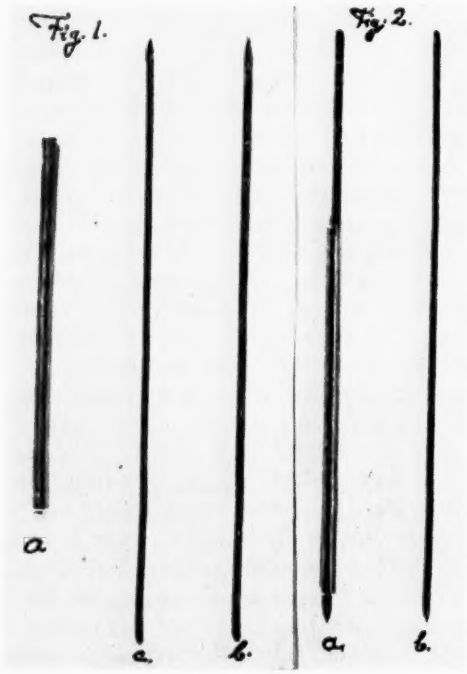

Fig. 1.

Length of the gouge	12.5 cm.
Ellipse of the tip of gouge	
Longer diameter	0.6 cm.
Shorter diameter	0.4 cm.
a. Gouge, length	12.5 cm.
b. Thicker steel pin	
Guide, length	19.0 cm.
Diameter of conductor	3.0 mm.
c. Thinner steel pin	
Guide, length	19.0 cm.
Diameter of guide	2.0 mm.

Fig. 2.

a. Gouge and guide introduced into it.
b. Thinner guide.

projects later in the course of its growth. In my opinion the nerve roots situated on the lateral side of the protrusion, or "riding" on it, should—as far as possible—be transferred to the medial side of the tumor adjacent to the dural sac. This is advantageous for several reasons, above all owing to the fact that when proceeding thus there is no fear of the nerve roots remaining, for instance laterally of the tumor, being injured in the course of the excochleation of the protrusion. Besides, a "scattered localization" of the nerve roots causes a disturbing continuous dislocation of those roots during the whole of the process of evacuation or, as will be seen later, while certain measures are being carried out.

While the nerve roots are being transferred in a medial direction—especially in the case of roots situated laterally from the protrusion—the patient suffers almost without exception from paroxysmal, neuralgic pain in the area of innervation of the corresponding peripheral nerves. The pain is sometimes excruciating. If, in such cases, 1 per cent novocain solution is injected into the neural root or into the enclosing dural sac, the pain has, in the majority of my cases, at once disappeared. Similar experiences have been met with earlier by Bradford, Spurling, Norlén and others. The transference of the nerve has then been carried out quite painlessly. This complete anesthesia is possessed of the great advantage that in the transferring of the nerve root, necessary attention can be devoted to the venous dilatations surrounding the nerve and all haphazard preparation can be avoided which would only occasion mechanical injury to new veins with consequent hemorrhage. As I have already mentioned, the removal of the nerves close to the dural sac possesses the advantage that the operational area around the seat of the protrusion extends considerably and the surgeon need not feel anxious about unintentionally

injuring the roots of the peripheral nerves when performing the excochleation. The operational area can be additionally extended by removing the dural sac and the adjacent nerve roots, by means of a couple of blunt hooks, over to the opposite side of the protrusion.

In this connection it should, however, be mentioned, that in some cases, on account of anatomical and topographical circumstances, the removal of the nerves situated laterally from the disc tumor close to the dural sac has proved technically impracticable.

When detaching the nerve roots bluntly from their foundation or transferring them to the neighborhood of the dural sac, the hemorrhage from the veins on the surface of the root has not generally been profuse. I have managed to stop it by using a light local compress, i.e., by placing on the bleeding point a cotton swab moistened in hydrogen peroxide solution, or by means of a stryphnon gauze compress.

II. On the surface of the protrusion there has always been, in my cases, a varicose plexus formation, the size of which has varied depending upon how severe a venous stasis has been produced by the disc herniation in each case. As the venous dilatations in question have very thin walls, the danger of venous rupture is close at hand if they are transferred from their proper locations at all carelessly; troublesome, profuse bleeding will then follow. The stopping of hemorrhage in the manner mentioned above usually takes an undue length of time and hampers the excochleation of the disc prolapse in spite of the use of a suction apparatus.

Can the hemorrhage in question be stopped in a satisfactory and effective way? In my opinion this is fully possible by destroying, by means of electrocoagulation, all the veins on the surface of the herniation over a sufficiently extensive area. Whether a needle-shaped electrode, or one in the form of a knife, or a knobhead electrode should be used for this purpose will, of course, depend upon the situation in question and upon the judgment of the surgeon. The varicose veins on the surface of the disc herniation will in this manner be easily and quickly destroyed over a sufficiently large area and the disturbing hemorrhage eliminated. Now follows the evacuation of the disc herniation itself.

III. This measure, the most important in the surgical management of disc protrusion, I performed in a couple of my first cases by attempting to introduce a sharp scoop through the firm connective tissue capsule surrounding the protrusion. I managed to do this, of course, but managed badly. The removal of the nucleus pulposus took, in addition, an unduly long time, and the nucleus was eventually removed in small loose fragments. The result did not seem to be in conformity with the large disc herniation and with the mass of nucleus pulposus scooped from within it. The excochliation left me with the impression that I had not been able to remove the degenerated nucleus pulposus completely.

In order to effect a really radical excochleation I had made two quite simple auxiliary devices. One of them is a round gouge, 12.5 cm. in length (4.5 inches), with an elliptic cavity, the longer diameter of which is 0.6 mm., the shorter 0.4 mm. The tip of the gouge is sharpened. To find out at what point the nucleus pulposus has protruded from its normal location—to ascertain, in other words, where the neck of the disc herniation is situated—I first use the ordinary, medium-sized needle of a puncturing syringe. I measure the depth to which the needle penetrates,

calculated from the bottom surface of the dural sac (the sagittal diameter being in the lower part of the lumbal area about 1 cm.). The needle penetrates usually about 3.2 to 3.8 cm. deep (1.15–1.39 inches), its point then meeting a solid obstruction. The depth of the cavity of the nucleus pulposus varied thus in my cases between 2.2 and 2.8 cm. Having drawn out the puncturing needle, I place it at exactly the same height on the surface of the protrusion and as close as possible to the point where the puncturing has been performed. Now it is very simple and easy to place the gouge tube at the correct point. A couple of light blows on the end of the gouge are enough to make the instrument penetrate into the intervertebral fibrous cartilage to meet the solid obstruction at the depth mentioned earlier. The gouge is removed and through the canal made by means of it, a sharp scoop or curette (Voris) is introduced into the nucleus pulposus. A couple of forcible ladlings of the scoop suffice to evacuate the degenerated mass of nucleus. Pueche uses for this purpose a narrow convex chisel which of course also makes for a serviceable procedure.

More recently, I have used, instead of the puncture needle, a rather thick pin, made of steel, 3 mm. in diameter, one end of which has been sharpened into a conical tip. The pin is longer than the gouge, 19 cm. (6.8 inches) (fig. 1). The pin acts as a reliable guide when the gouge tube is installed (fig. 2). The pin is naturally withdrawn before the gouge is stuck into the nucleus pulposus. It is of course essential that there be gouges of different sizes at hand, with a view to the possibility of the disc herniation being situated elsewhere than in its classic locations (L_3–L_4, L_4–L_5, L_5–L_6), since in the first-mentioned portions of the spinal column the fibrocartilago-intervertebralis is considerably thinner than in the lumbar or lumbo-sacral portions. When aspiring to as great thoroughness as possible in one's work, one can make sure, with some additional scoopings, that the degenerated tissue has been completely removed from the cavity of the nucleus pulposus, all along the osseous surfaces of the vertebrae bounding it and along the solid anterior wall of the cavity. If the varicose veins have been electrocoagulated on the surface of the protrusion on a sufficiently extensive area, its fibrous capsule can be completely removed without any risk of hemorrhage. The removal can be performed either with a knife, with small scissors, or by using an electro-coagulation knife.

It is perhaps not out of place to point out that the procedure described in the foregoing is serviceable not only in cases of unilateral but also in bilateral disc herniations. Nothing prevents one, moreover, from making two gouged holes, for instance (with a view to the excochleation of large herniations), through which complete removal of the protrusion is technically fully insured. Such a relatively extensive primary removal of the capsule of the protrusion corresponds to the convex-chisel procedure used by Pueche.

I should also like to mention that by making use of this method of excochleation carried out, so to say, "from the inside," I have succeeded in removing degenerated parts of the intervertebral disc which have been comparably larger in size than was the case in my first operations.

SUMMARY

While the author frankly states that he has not had any very extensive experience with excochleation of disc hernia-

tion, and is not at all sure that his own work may not have been parallelled by other workers in France or Anglo-America, he undertakes to offer a method of dealing with the three-fold problem presented by this condition, that he has worked out as a result of earlier failures with more conventional procedures. He first discusses these earlier failures, then outlines the three chief obstacles to be overcome. He then describes in detail his own procedure. His illustrations are of instruments he has devised for use with this procedure.

RÉSUMÉ

Quoique l'auteur admette que son expérience avec l'excochléation pour l'herniation des disques n'est pas très etendue et qu'il se peut que ses recherches parallèlent l'ouvrage deja fait en France et en Amérigûe, il présente une méthode de traitement qu'il pratique après avoir échoué avec des méthodes mieux connues. Il discute des anciens échecs, et décrit les trois principaux obstacles à surmonter. Il présente des illustrations des instruments qu'il a inventés pour faciliter son procédé.

RESUMEN

El autor dice con toda sinceridad que él nunca ha tenido una experiencia verdaderamente extensiva con la extirpación de la hernia, y que no está del todo seguro de que su trabajo no haya sido hecho ya por otros técnicos en Francia, Inglaterra o los Estados. De todos modos cree ofrecer un método de tratamiento de tres casos que se le presentaron en dichas condiciones y que realizó después de haber fracasado con los procedimientis usuales. En el primer caso expone sus fracasos iniciales y define igualmente los tres principales obstáculos que tiene que remontar. Tambien describe en detalle su propio sistema. Ilustra el trabajo con los instrumentos que él inventó para usar en su tratamiento.

Свод

Автор заявляет, что хотя он не имел большого опыта в экскоклеации дисковой грыжи и, что он не уверен, что его работа не была уже совершена другими во Франции и Англо-Америке, он все же предлагает свою методу разрешения трех-сложной задачи, представленной этой болезнью. Он выработал этот способ в результате прежних неудач при применении более принятых метод. Он сначала описывает свои ранние неудачи, затем дает три главных препятствия, которые необходимо преодолить. Затем он подробно описывает свой собственный способ. Иллюстрации показывают инструменты, которые он выработал для применения этого способа.

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(Continued from page 530)

En la primera parte, el autor describe los resultados obtenidos cuando la piel y el omento provenían del mismo animal que servía para el ensayo. En la segunda parte habla de los esfuerzos para lograr injertos con los mismos métodos pero de un animal a otro. En el primer grupo de experimentos, el resultado fué positivo, pero en el segundo, fué completamente nulo.

(Continued on page 541)

Carcinoma of the Breast*

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IN presenting the subject of carcinoma of the breast to any group of surgeons, one is fully conscious that little original material remains unpublished on this all important subject. My justification is based upon the fact that we have a fairly satisfactory mortality rate in a study of 1,000 cases of carcinoma of the breast, and that this rate is believed to be definitely associated with, and in a large measure, due to:

1. Definite classification and grouping of cases;

2. Pre- and post-operative management;

3. Especial emphasis on certain points of operative procedure.

Breast cancer constitutes 40 per cent of the cancer problem since 40 per cent of all cancers occur in the female breast. These are distributed one-third in the upper outer quadrant of the breast, one-fifth in the central area and the remainder in various other areas. A careful survey is being made by the American Cancer Society, The International Board of Cancerology of the International College of Surgeons and other similar groups to determine the extent of the spread of cancer throughout the world. Already it is conservatively estimated that there are 50,000 women in the United States suffering from cancer of the breast. The life expectancy of a patient with an untreated cancer of the breast is only three years, thus making an economic problem of astronomical proportions.

Tumors of the breast have been referred to by as many as 54 names and classifications. Yet, for a working level, we are well aware that true tumors of the breast fall into two groups, of which 15 per cent are fibro-adenomata and 80 per cent are carcinoma. The remaining 5 per cent represent the controversial classifications of various pathologists. Boyd is emphatic in his contention that every tumor of the breast should be regarded as malignant until biopsy has proven otherwise. Regardless of how we professional men regard these tumors, the womans interest centers around the four symptoms for which she primarily seeks advice; namely,

1. The proverbial "lump",
2. Bloody discharge from the nipple,
3. Ulceration of the nipple, and
4. Pain.

We have learned that the "lump" is 90 per cent malignant in women above 40 years of age; this flagrant truth should demand thorough and adequate treatment. Further consideration, perhaps, should be given the 15 per cent of tumors of the breast referred to above as fibro-adenomata.

There is the pericanalicular type which is relatively rare, hard to the touch, slick and slippery, which grows large and comes out of its capsule easily when incised. Grossly on section, they cut like cartilage, are whitish in color and do not present the gritty feeling which is evident in handling tissue of a scirrhous carcinoma. This type of growth is mostly seen in patients from puberty to age 25.

The second type is the intracanalicular fibro-adenoma seen in later life (30–50 years), is more fibrous, resembles the prostate gland on section, is grayish-white in appearance and contains many small cauliflower-like masses. This in-

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tracanalicular type may grow very large and degenerate into true carcinoma.

There is the third type involving the ducts which is classified under various names such as adeno-cystoma, intracanalicular cyst-adenoma, etc. The involvement is usually close to the nipple and presents a papillomatous growth which projects into the dilated ducts. The blood vessels are large thin walled, and vascular; therefore bleeding from the nipple is one of the main characteristics.

Chronic cystic mastitis, referred to by Cheatle as mazoplazia, by Whitehouse as mastopathy and by Smith as lobular hyperplasia, is a painful nodular condition of the breast presenting multiple cysts or one large solitary cyst—the "blue dome" cyst of Bloodgood. The condition is one of benign hyperplasia, grows slowly, is usually seen in only one breast, may or may not be constantly painful and may eventually extend to the other breast. When pain is present, it is worse at menstruation. Axillary glands may be enlarged and painful. A series of conflicting observations are present in cystic mastitis, e.g., the single or multiple invasion in one or both breasts, the granular infiltration felt when palpated between the finger and thumb or the glands may not even be palpable but just tender and sensitive to the touch. This is in contradistinction to the numerous shot-like enlargements of glands usually felt in this condition. Many times a serous-like discharge is noted or may be expressed from the nipple. These glands are not adherent to the muscles nor to the skin, but because of subcutaneous enlargement around Cooper's ligaments, retraction or distortion of the nipple may be seen.

On gross section of these glands, the lesion is tough like rubber, yellowish-white, not encapsulated and not definitely circumscribed. They are usually multiple, freely movable and do not have the stony hardness or the familiar yellow streaks or specks so characteristic of malignancy in the breast.

Schimmelbusch described a condition in which numerous small cysts are present throughout the breast. Bloodgood called attention to a preponderance of larger cysts situated deep in the breast tissue. These cysts contain a clear or cloudy but never hemorrhagic fluid. The presence of blood in the contents of these cysts is strongly suggestive of malignancy. A passing peculiarity is noted clinically in the "blue dome" cyst inasmuch as the bluish appearance promptly disappears when the cyst wall is punctured.

True cystic mastitis progresses slowly with cycles of regression and exacerbation over a period of 15–30 years. Sixty per cent recover spontaneously under general tonics, exercise, wholesome diet and the judicious use of progesterone.

Solitary cysts may be aspirated; this is curative in 75 per cent of cases. The aspirated fluid contains an excess of Estrin which justifies the withholding of Estrone therapy in cystic disease of the breast. In the cases which do not respond to the above treatment, surgical removal should be done (1) because they have a tendency to grow larger, (2) because 10 per cent of them may become malignant, (3) because removal and examination removes a disturbing mental anxiety from the patient.

Before a consideration of cancer of the breast is made, the lesions above referred to should and must be considered from a differential diagnostic viewpoint. The pathological records of our hospitals throughout the country are too full of reports of benign lesions, in which total or even radical mastectomy has already been performed.

The relationship between cystic dis-

ease of the breast and carcinoma has not yet been conclusively settled. Benign tumors constitute 31 per cent of tumors of the breast, as classified by the Brooklyn Cancer Institute. The only safe way to evaluate the pathogenesis of any breast tumor is by biopsy and from a frozen section of a completely resected tumor.

The remaining 70 per cent of true tumors of the breast are frankly malignant, which is equivalent to one in seven of all the carcinomas of all organs of the body. This figure is practically equal to carcinoma of the cervix uteri and is exceeded only by lesions of the stomach (an organ common to both sexes).

CLASSIFICATION

Classification of carcinoma of the breast is a rather perplexing problem to the men who are called upon most to deal with these lesions. I like to think in terms of a practical anatomical classification as suggested by Ewing;

1. Adeno-carcinoma arising in cysts of ducts or in sweat glands;
2. Ductal carcinoma arising in the lining cells of ducts;
3. Acinar carcinoma arising in the acini.

This classification makes easier the correlation of the origin, the gross anatomic and histologic features, as well as the clinical behavior of the disease.

If one considers the mammary gland as consisting of some sixteen units, each having a large duct and its branches, the terminal ducts and acini, and then considers one of these ducts individually, we find that cancer may arise in any one of four locations:

1. in the main branch near the nipple and areola;
2. in the smaller branches at the mid portion;
3. in the terminal ducts and acinii;
4. in several or all of the ducts.

It is generally considered that malignancy arising in the large ducts is of the lowest grade and that arising in the terminal ducts and acini are of the highest grade of malignancy, and, therefore, the most rapidly fatal. Stated another way, malignancy increases in severity as it passes from the main ducts near the surface or periphery to the deeper structures.

Of the adeno-carcinoma group, two types are of clinical interest; namely, the hard scirrhous variety usually seen in thin, elderly women which may have existed from 10 to 20 years. This slow growth is most probably due to the restraining influence of the connective tissue in the breast. The second is the atrophic or withering scirrhous type in which fibrous connective tissue predominates over the epithelial cellular hyperplasia. Ulceration often occurs in this type. Sometimes this tumor becomes highly cellular with scanty stroma and could well be called a soft medullary or encephaloid cancer. Colloid degeneration may occur in any of these forms.

The hard scirrhous is by far the most common form of adeno-carcinoma in the breast. It begins as a hard nodule with greatest predominance in the upper outer quadrant, becomes fixed to the deep fascia and later to the skin. One observation worth mentioning is that flat, fixed enlargement is suggestive of malignancy while local prominence suggests cystic formation. Dimpling of the skin due to edema, is often a moderately late symptom and is also the basic process found in the milk ducts which cause fixation and retraction of the nipple.

METASTASIS

The spread of adeno-carcinoma to the proximal areas and organs is by way of the lymphatic system, but to the

distant areas by the vascular system as emboli and transplantation. In the order of frequency, these embolic transplants occur in the:

Pleuro, pectoral and intercostal spaces	51%
Lungs	50%
Bones	25%
Opposite breast	5%
Skin and liver	25%

The spread to these organs goes from the site of the growth down through the breast tissue to the plexus of lymphatic glands which lie upon the deep fascia. From here, they invade the axillary, infraclavicular, supraclavicular and cervical glands. The further insiduous invasion of the anterior and posterior mediastinum is carried by and along the lymphatic glands accompanying the branches of the inferior mesenteric artery. The pleura and bronchi are invaded by the intercostal lymphatics. The peritoneum receives its metastasis through lymphatic glands lying along the falciform ligament and those along the fascial planes of the recti muscles. The opposite breast is invaded by a cross lymphatic connection between the two breasts. Skin is invaded through the fascial plexus of lymphatics and by direct contiguity.

This latter condition may well explain the clinical picture presented at various stages of the disease. The skin often shows dusky red or purplish macules of varying size or even larger, like papules, which may be seen as single or confluent lesions. Lymphatic obstruction ensues, causing contraction of skin resembling an organ or pigskin—the so-called "peau d'orange" of Leitch—in which there is discoloration, fixation to chest, loss of pliability, and the "iron plate" picture of the so-called "Cancer en Cuirasse". It is not uncommon at this terminal stage to see blood-tinged fluid escape from the nipple, ulceration with thick elevated edges, and a granular necrotic base with a foul ichorous discharge.

The arm often presents a swollen appearance due to lymphatic extension and partial block to axillary vessels. Edema is first noted on the medial or posterior portion of the arm and then extends to the hand and finger, giving a sense of pain and weight resulting from edema and pressure on the brachial plexus.

The gross appearance of adeno-carcinoma at the time of operation is that of a flat, firm to hard lesion from which radiate multiple processes out into the fat. These are at once suspicious of malignancy. Upon section of the tumor mass, it is gritty, like an unripe pear and contains white striations, (also seen in the pear), which are comparable to the bands of fibrous tissue seen in the growth. The appearance of the cut surface is grayish, in contrast to the white appearance of fibro-adenoma or the yellowish tinge in cystic disease. Scattered on the cut surface are seen pale yellow dots and streaks. These are necrotic cells; if these areas be scraped with a scalpel, a milky fluid will be obtained known to many pathologists as "cancer juice".

The medullary or encephaloid type is a soft, rapidly growing, rapidly metastasizing tumor to the skin, causing ulceration of a large fungating mass. The condition spreads throughout the breast and is highly destructive, so much so that pieces of friable tissue may literally be picked out of the ulcer crater with a forcep. Rapid enlargement of the axillary and supraclavicular glands with secondary nodules in the skin are diagnostic. The course is accelerated by lactation; this is the one time when the greatest vigilance must be observed lest the death-dealing carcinoma may be diagnosed as an acute mastitis. There

is little treatment effective in this condition and death usually occurs in three to six months.

I have tried in the above analysis of the the spread of carcinoma of the breast to show the highly important factor the fascia plays in the metastasis and in the subsequent treatment of this disease. That shall be referred to again under treatment.

Paget's disease, first described by Sir James Paget in 1874, is responsible for 1 per cent of carcinomata of the breast. It is first noted as an intractable eczema of the nipple. This condition may remain stationary for two to ten years and then become carcinoma at the site or removed from the exact area of the long existing lesion. The picture is one of bright red appearance, granular, moist and weeping, or dry and scaly. Discharge is more predominant in the right breast and in women of 35 to 70 years of age.

Histologically, there is a pronounced epidermal hypertrophy, sub-epidermal round cell infiltration and large clear cells with nuclei known as Paget's cells. It is now almost universally considered a pre-cancerous lesion of the intradermal mammary ducts, and is not satisfactorily amenable to x-ray therapy.

SUMMARY

The subject of carcinoma of the breast has been covered in the literature with extreme thoroughness, probably due to the fact that this particular type of lesion constitutes fully 40 per cent of the entire cancer problem. Although as many as 54 names and classifications have been assigned to various manifestations of this group of lesions, the author believes that actually, in practice, true breast tumors fall into only two general groups, of which 15 per cent are fibroadenomata and 80 per cent are carcinomata. The remaining 5 per cent include all the many variations causing controversy among pathologists.

The author discusses rather briefly the various manifestations of the types he designates, including some notes on differential diagnosis. He uses, at several points, pungent, homely similies that give extreme clearness to his descriptions. He includes some notes also on symptoms, as well as on duration and life expectancy. He stresses the need for clinical recognition by the surgeon of the lesions found at preoperative and operative examinations. These are confirmed, or changed by the subsequent pathological report. The article is intended for guidance of the surgeon-clinician, and is not submitted as a mere academic treatise.

Treatment of the various lesions will be discussed in a later paper to be published in this "Journal".

SOMMAIRE

Le carcinome du sein a été étudié par de nombreux médicins et de nombreux chirurgiens. La littérature du sujet est volumineuse. Cette lésion constitue plus de quarante pour cent du problème du cancer. Quoique les manifestations du cancer mamaraire aient ete classifiées sous cinquante-quatre rubriques, l'auteur est d'avis que les tumeurs du sein appartiennent à un de deux groupes. 15 pour cent étant des fibro-adénomes et quatre-vingt pour cent des carcinomes. Les autres cinq pour cent présentent des variations sur lesquelles, les pathologistes ne sont pas d'accord.

L'auteur discute assez brièvement les différentes manifestations des types qu'il désigne, et nous donne des aperçus sur le diagnostie diffèréntiel. Ses descriptions sont d'une extrême clarté. Il énumère les symptômes, leur durée et la survie ordinaire.

Le traitement des différentes lésions sera présenté dans une publication à suivre, cette publication paraître dans ce "Journal".

RESÚMEN

El tema del cáncer de pecho ha sido tratado por la literatura médica con gran profusión y minuciosidad, debido, seguramente, a que ese tipo de lesiones constituye el 40% del problema del cáncer en general. Aunque se han asignado alrededor de 54 nombres y clasificaciones a las varias manifestaciones de este grupo de dolencias, el autor cree que, actualmente, y de un modo práctico, los tumores de pecho se dividen solamente en dos grupos, de los cuales el 15% son fibro-adenomatosos y un 80% fibro-cancerosos. El otro 5% incluye las diversas variaciones que todavía se hallan bajo la controversia de los científicos.

El autor expone brevemente varias manifestaciones del cáncer, incluyendo algunas notas sobre el diagnóstico diferencial. En muchos de los puntos expuestos el autor usa términos caseros que proporcionan extremada claridad a sus descripciones. También incluye algunas notas sobre síntomas, duración y esperanzas de vida.

En otro número de esta publicación se tratará del tratamiento de varias lesiones.

Свод

Вопрос о раке женской груди очень тщательно разработан в литературе, повидимому потому, что этот тип поражения составляет полных 40% всей проблемы рака. Хотя существует 54 имени и классификации, относящиеся к разным проявлениям этой группы рака, автор думает, что с практической точки зрения, все опухоли грудной железы делятся на две общие группы: фиброаденоматозные опухоли составляют 15% и карциноматозные 80%. Остающиеся 5% включают все другие вариации, ответственные за несогласие между патологами.

Автор кратко описывает симптоматологию этих групп, включая дифференциальный диагноз. В нескольких местах он употребляет острые, но простые, сравнения, делающие его описания очень ясными. Он включает заметки о симптомах, продолжительности болезни и жизненной предположительности.

Лечение этих поражений будет дано в последующей статье в этом журнале.

(Continued from page 535)

Свод

Статья состоит из двух частей, и дает результаты работы автора над экспериментальными животными в прививке кожных трансплантатов на подкладке секции брюшника. В первой части он описывает результаты полученные, когда кожа и брюшник были от животного, над которым производился опыт. Во второй части он говорит о своих попытках обмена трансплантатов при этой методе от одного животного к другому. В первой группе опытов результаты были хороши; во второй трансплантация была совершенно неуспешна.

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(Continued on page 578)

Intra-Abdominal Plastic Repair*

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NEW YORK CITY

PLASTIC repair is usually associated with marked disfiguring facial or other deformity affecting the mental and emotional stability and even the economic value of the afflicted individual; hence the need for repairs making for more natural configuration. Often when the facial disfigurement is so extreme that the end result of surgery is unsatisfactory, or during the period of operative repair, facial masks developed to a high standard during the first World War, are utilized.

The value of plastic reconstruction for gross abnormalities and for the functional restoration of the body framework, skeleton, muscles and nerves also must not be minimized. Plastic operations *within* the body to correct defects which may seriously affect essential functions of the internal organs or of the body as a whole, are of extreme importance. Upon such repair the general health of a patient may depend; even a chronic invalid may be converted to a healthy member of the human family.

Plastic surgery within the abdominal cavity demands, as a primary requisite, an understanding of the mechanics of the organs and of their relation to one another. The operator must visualize changes in the position of each part of the abdominal viscera in both the standing and the prone postures, for this often must direct the surgical procedure. Adhesions or bands which do not seem to be important factors when the patient is in the prone position may become taut or cause angulations or obstructions when the patient is erect. The operator should put gentle traction downward on the hollow organs in order to make clear the effect when erect. A reverse Trendelenburg often serves the same purpose. When Man in his evolution assumed the erect posture, mechanical changes occurred, particularly in the gastrointestinal tract. The abdominal viscera tended toward a downward displacement and called for a reconstruction of the mechanics of the tract. The development of bands in many instances is Nature's attempt to support the organs, but these bands often become so strong, overdeveloped and unyielding that they firmly fix portions of the naturally movable tract; at these sites kinks may develop and partial obstruction often takes place. As we know, there are also congenital bands, as well as those that develop from a mechanical response to a physiological demand or to an inflammatory condition.

Plastic repair within the abdomen is too large a subject to take up fully in so short a paper; the writer is limiting himself to plastic surgery of the gastrointestinal tract.

The patency of this tract is essential. The retention and absorption of material that should be eliminated—intestinal stasis resulting in toxic poisoning—weaken the resistance of the body as a whole and may result in abnormal changes in other tissues or organs.

The vast majority of cases of intestinal stasis or intestinal toxemia do not require surgery if the existing condition be recognized in time and given ade-

* Read at the Fifth International Assembly, International College of Surgeons, Lima, Peru, March, 1946.

quate and proper medical and dietetic treatment and supportive measures. These may be designated as the *first group.*

In the *mid group* of stasis cases, are those that may be relieved by moderate surgical procedure, such as the removal of an appendix, the cutting of bands, the covering of raw surfaces, the replacing of hollow organs in normal position, the relieving of kinks, etc. Such procedures followed by proper after-care are usually all that is necessary.

There is a small group, however, the *end group,* which require radical surgery. These cases have conditions so advanced that they demand an ileo-colostomy, sometimes with colectomy, with the usual attention to after-care.

My work with Lane, Moynihan and Gosset as well as experience in my own cases through many years, have proved Lane's statement that about ninety per cent of cases of intestinal stasis may be cured non-surgically and that, of the remaining ten per cent requiring surgery, less than one per cent demands some radical operation such as removal of a viscus, in whole or in part.

Adequate intra-abdominal plastic repair is time-consuming. However, the time involved is not of the first importance if meticulous care is taken and the patient is safeguarded. *Haste in this field is dangerous.*

Adhesions around the pylorus or from the gallbladder across the first portion of the duodenum and down to the ascending or transverse colon, often cause a constant indentation (as observable in roentgenograms), which may lead to an erroneous diagnosis of carcinoma. A very simple plastic operation may cure a so-called "malignancy."

Important too, and giving rise to many indefinite symptoms, are intestinal diverticula, congenital or acquired.

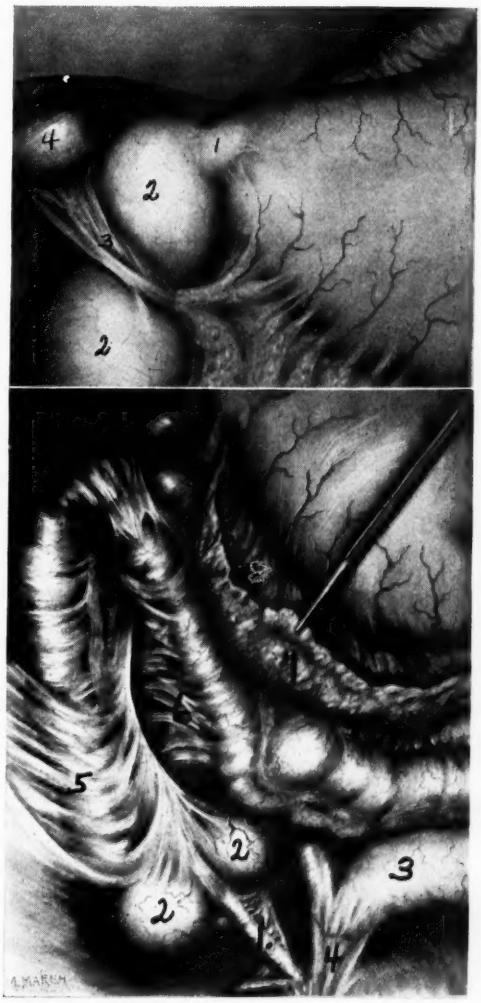

Fig. 1. *Case 1. Upper:* 1. Duodenal ulcer; 2. Dilated duodenum; 3. Adhesive bands from gallbladder indenting duodenum; 4. Gallbladder. *Lower:* 1. Kinked appendix; 2. Diverticulated cecum; 3. Dilated ileum; 4. Ileopelvic band; 5. Pericolic bands; 6. Adhesions between ascending and transverse colon; 7. Omentum freed from attachment over colon which had caused prolapse of stomach.

When there are definite continuing symptoms that are not relieved by medical treatment, resort must be had to surgery. Roentgenograms are very useful; these, together with a careful historic review of the case and adequate

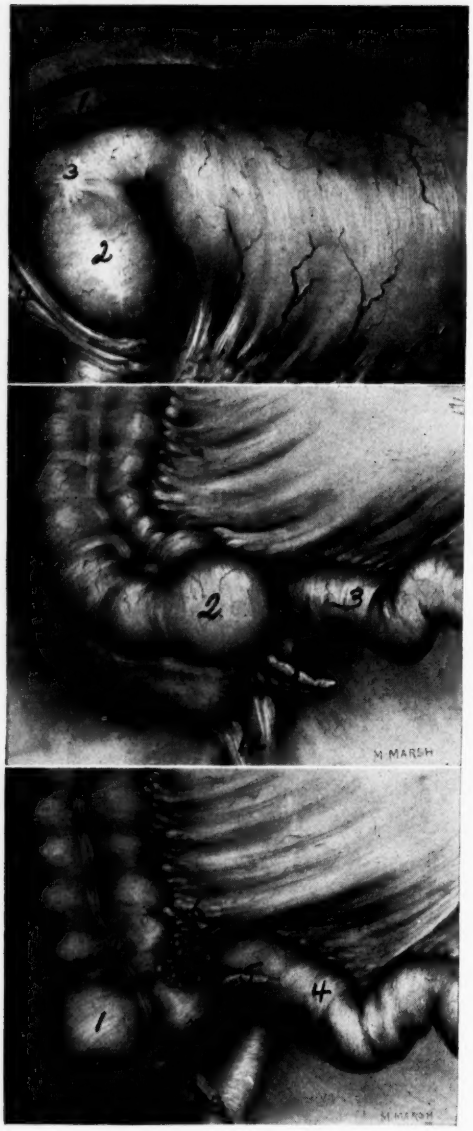

Fig. 2. *Case 2. Upper:* 1. Gallbladder; 2. Dilated duodenum; 3. Scar of healed ulcer of duodenum; 4. Band from gallbladder across duodenum to gastrocolic omentum. *Middle:* 1. Chronic appendix with adhesions; 2. Diverticulated cecum; 3. Dilated ileum; 4. Bands into pelvis. *Lower:* 1. Cecum; 2. Longitudinal bands placed in correct functional position; 3. Raw surfaces covered after removal of appendix; 4. Ileum; 5. Fold of Treves; 6. Note importance of having no angulation or rotation of the ileum at its junction with the cecum (as pointed out by Chandler).

physical examination, give the diagnosis and point the way to treatment. However, exploratory laparotomy is often delayed too long; direct inspection of the abdominal content would have saved time, and perhaps the life of the patient, in some complicated cases. Chronic diverticula are often eliminated by the cutting of bands, the straightening of kinks and the enfolding of the sac.

I have observed, in women, in many instances, a definite relation between such conditions and "lumpy" breasts. Some of these patients showed seemingly suspicious masses, some with bleeding from the nipple. A number were even referred to me for radical mastectomy for malignancy, yet their symptoms were completely relieved by abdominal or pelvic plastic repair. Often it was not necessary to give any direct surgical treatment to the breasts; the condition was the result of autointoxication. In toxic cases, especially with pendulous breasts not well supported, there frequently appears a line of small masses in the breast substance along the outer side, on the line of the pectoralis major. This site is where the attachment of the breast is most marked; I have denominated it the line of "pectoral tug." In patients in middle life with congenitally retracted nipples and these small masses along the pectoral tug, a mistaken diagnosis of carcinoma is sometimes made; an unnecessary radical operation may be performed.

Cases of hyperthyroidism, with or without exophthalmos, have returned to normal when the focal infection (often in the gastrointestinal tract) was relieved. The resultant elimination of the toxic state that was causing the thyroid dysfunction removed the symptoms.

Among the most interesting cases in my experience have been those in which

I have found sufficient gastrointestinal pathology to warrant operation in the hope of eliminating epileptic seizures. The results obtained in numbers of instances have been so satisfactory (i.e., without recurrence of the convulsions, petit or grand mal), that it behooves us to look upon this tract with suspicion in any case that is classified as idiopathic—meaning that we have not found the cause.

The First and Second World Wars brought to the fore traumatic abdominal injuries of all kinds where there have been delayed effects demanding attention. Many peacetime industrial accidents give a picture similar to these war

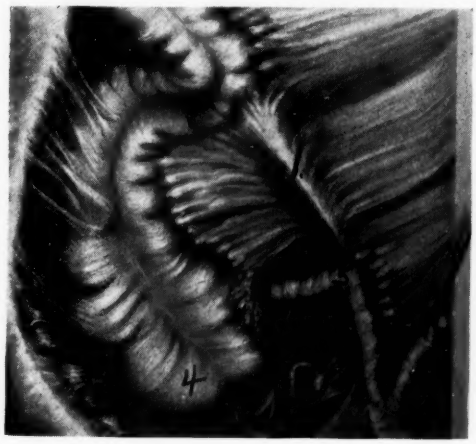

Fig. 3. *Case 3.* 1. Condensation band; 2. Multiple ileopelvic bands; 3. Kinked appendix caught in ileopelvic band; 4. Cecum; 5. Kinked ileum.

injuries. As we all know, there are immediate effects of trauma that demand attention without delay, but there may be sequellae that give persistent local symptoms sometimes years after the accident, with a general disturbance of the normal functioning of the body. In some instances, as in the immediate zone of combat, an imperative operation performed with speed, may mean rough handling of the parts, causing operative

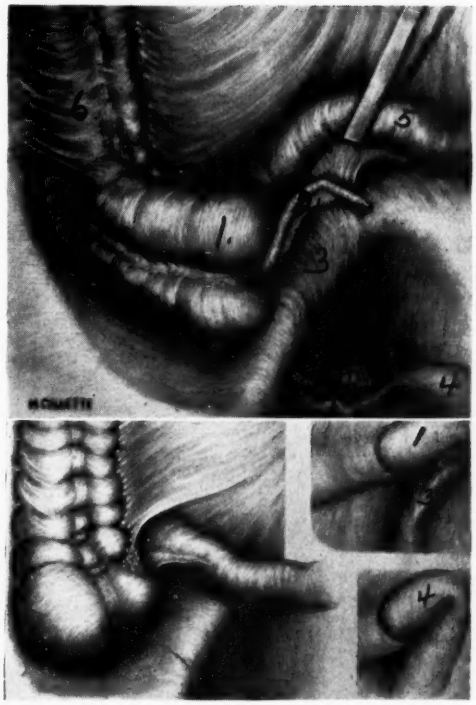

Fig. 4. *Case 4. Upper:* 1. Diverticulated rotated cecum; prolapsed when in erect posture; 2. Chronic appendix; 3. Bands from meso appendix and ileum into pelvis to fibroid in right ovary; 4. Uterus; 5. Ileum held up by retractor; 6. Pericolic bands (often called Jackson's membrane). *Lower:* Conditions corrected by plastic operation; appendix removed, longitudinal bands placed in proper position for adequate function. 1. Dilated duodenum; 2. Kink in duodenojejunal junction; 3. Jejunum partially collapsed; 4. Shows preceding conditions corrected.

trauma, inflammation and adhesions. At such times, it may be that only the gross pathology can be attended to, as a life saving measure; the fine details of operative technic must of necessity be sacrificed to the exigencies of the moment. Thus there are left in the abdomen, pathological conditions that may become worse with the passage of time and require later surgical repair.

Particularly evident in the war just ended, where there has been so much naval combat, has been the result of immersion blasts that may cause serious internal injuries, especially to the ab-

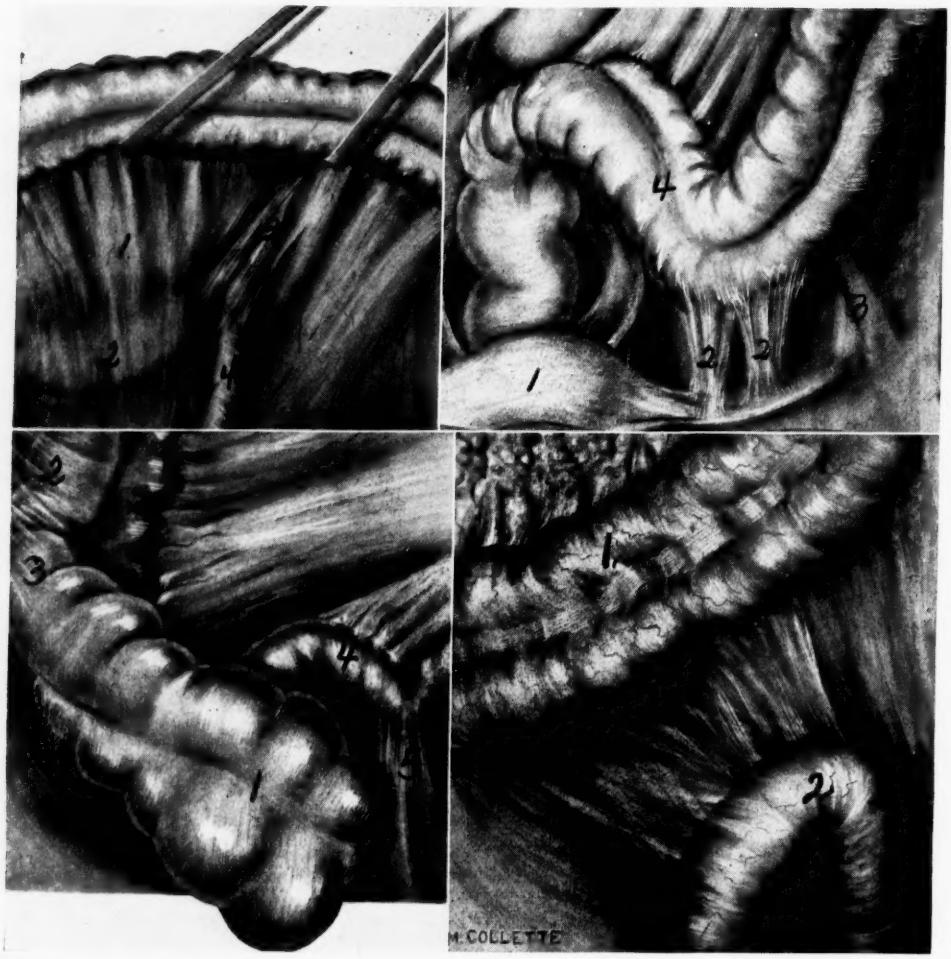

Fig. 5. *Case 5. Upper left:* 1. Transverse mesocolon; 2. Duodenum showing through mesocolon; 3. Band causing kink at duodenojejunal junction; 4. Jejunum. *Lower left:* Diverticulated cecum prolapsed and rotated inward, causing partial obstruction at beginning of pericolic bands; 2. Pericolic bands; 3. Site of angulation; 4. Ileum; 5. Ileopelvic bands (often called Lane's band). *Upper right:* 1. Uterus; 2. Bands binding sigmoid to broad ligament and extending below pelvic brim; 3. Pelvic brim; 4. Sigmoid. *Lower right:* One year later (abdomen opened for other conditions). 1. Transverse colon; 2. Normal curvature at duodenojejunal junction.

dominal structures, because of the submerged position of the abdomen. Despite the fact that many patients recover without operation, there is often delayed intestinal perforation, and also multiple areas of interstitial hemorrhage throughout the gastrointestinal tract (usually extensive in the ileocecal portion). In addition, the mucous membrane may be torn, with accompanying bleeding. In shipwrecked men injured by depth-charge detonations, bowel rupture without skin breach has been observed. Immediate surgery within a few hours of the injury is of the essence in traumatic perforations of the

Fig. 6. *Case 6.* 1. Large diverticulum of cecum; 2. Brim of true pelvis; 3. Compound ileopelvic band; 4. Appendix; 5. Ileum.

ileum from non-penetrating abdominal injuries.

In gunshot wounds of the abdomen, which perforate intestines and blood vessels and do other damage in this region, as much immediate repair as can possibly be performed, must be attempted, with ligation of the blood vessels and repair of all perforations. Traumatic abdominal injuries of any kind may result in inflammatory bands, kinks, adhesions, necrosis of the intestinal wall, mesenteric rents, volvulus and diverticula (or cause rupture of diverticula already present). It must be realized that chronic irritation within the abdomen, if not properly relieved, may eventually lead to carcinoma at the sites of irritation.

It is of the utmost importance to perform as careful and complete plastic operation within the abdomen as possible. Adequate relief of points of obstruction and elimination of scars and deformities from within the abdominal cavity, result in the eventual clearing up, in many instances, of general physical debility and in some even of mental instability.

Unless for some reason there is contraindication, such as an acute state where time is a factor, I submit that the following suggestions should be carried out in operations for intra-abdominal plastic repair. Through the centuries every effort has been made to have surgery safe for the patient. We must also endeavor to make the patient safe for the surgery. The question of possible syphilis should be answered,

Fig. 7. *Case 7.* 1. Gallbladder; 2. Gastrocolic omentum; 3. Y-bands from liver across duodenum to transverse colon and gastrocolic omentum; 4. Transverse colon; 5. Duodenum.

as well as that of the sugar content of the blood (in order to increase or limit the amount of glucose to be given); also the coagulation time to ascertain whether, to prevent undue loss of blood, preliminary doses of calcium need be given (in the form of gluconate, or vitamin K, or pulverized egg-shell sandwiches). The following steps, then should be taken:

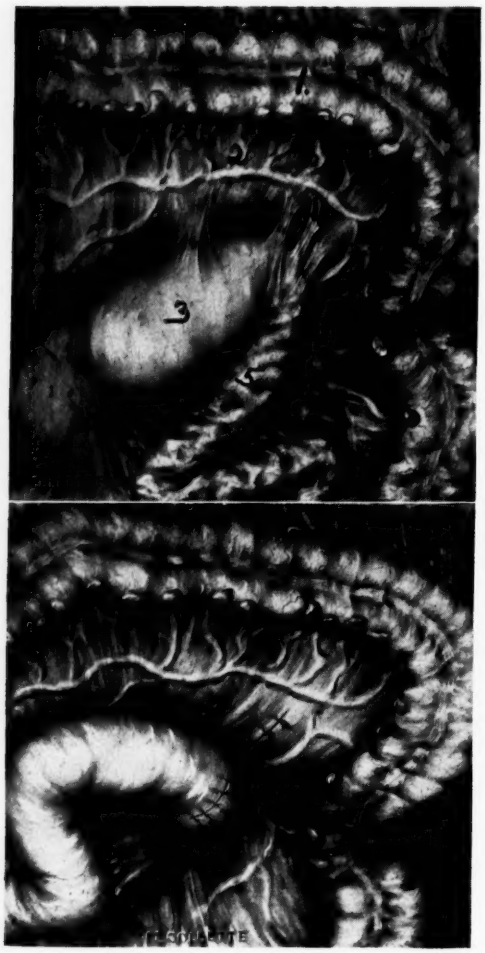

Fig. 8. *Case 8. Upper:* 1. Transverse colon; 2. Transverse mesocolon; 3. Dilated duodenum proximal to duodenojejunal kink; 4. Bands obstructing outlet of duodenum; 5. Collapsed jejunum. (These conditions were clearly shown only when transverse colon was lifted up and parts fully inspected.) *Lower:* Conditions corrected by plastic repair.

1. Have blood plasma or whole blood ready in case of need.

2. Hydrate the patient thoroughly preliminary to operation. When this is impossible, then during or immediately following surgical procedure, use normal saline solution freely, adding glucose if hyperglycemia is not present, either by the most effective venous route or by hypodermoclysis or enteroclysis.

3. Catheterize the patient when on the table and under the anesthetic. This is especially important for women.

4. So place the incision that it will do the least amount of damage to the integrity of the abdominal wall, but make it large enough for a thorough survey of the abdominal contents.

5. Use careful hemostasis.

6. Avoid strong retraction to eliminate possible trauma to the soft parts.

7. Handle viscera carefully to avoid trauma in the field of operation.

8. When possible operate in a fluid field, using normal warm saline solution to lessen the possibility of trauma from handling even with rubber gloves.

9. Introduce only warm instruments into the abdomen (heat by placing in warm saline solution).

10. Perform meticulous plastic surgery. Bisect bands and adhesions transversely and sew up longitudinally. If there are raw surfaces that cannot be covered or inverted it may be necessary to cover them with fat from the great omentum or the thigh.

11. After removing the appendix, quilt the implantation area with black linen and fasten the stumps of the longitudinal bands to the meso of the appendix. This will avoid rotation of the ileocecal orifice and not invite diverticulation of the cecum.

12. Anchor a mobile cecum to the posterolateral shelf of the abdomen.

13. When there are large diverticula that require attention, touch the surface of the part to be enfolded with strong iodine solution to order to promote adhesion of the enfolded part of the gut to hold it in place.

14. Investigate the sigmoid between its attachment to the brim of the pelvis,

for so-called "last kink" which is often hypertrophied, gives chronic partial obstruction, and may be a factor in colonic retention. This should always be corrected when present.

15. Whenever possible, leave warm saline solution in the abdomen and keep the patient in the Trendelenburg position for a short time so that the solution may flow under the liver and around the solar plexus giving warmth and support. This solution is absorbed rapidly. In some cases pure oxygen or amfetin may be utilized. Place the patient in the normal position after closure.

16. When closing the abdominal wall, include in the line of suture any peritoneum that may have been traumatized by retraction or clamping, so that the traumatized parts are turned *out*, not inside the abdomen to invite adhesions.

17. Fine linen or silk is preferable for sutures within the abdomen; I use linen. Black is easier to handle and if, in the future, another laparotomy is required, a little dye will identify the previous operative field and its result. It has been claimed that the peritoneum is allergic to plain catgut. Babcock advocates alloy steel wire.

18. As an added guard against irritation, before using intestinal sutures one may immerse them in bland liquid paraffin free from efflorescent hydrocarbons or sulphur by-products.

19. Tie sutures securely, tight enough to hold the parts in approximation but not so tight as to cut through the tissues and weaken the part or invite sites of local necrosis.

20. Where there is any impairment of the circulation, interrupted sutures are preferable; the continuous variety do not conserve the blood supply as well along the line of approximation.

21. Do not have knots in sutures impinge on the line of approximation of the wound or at the point of puncture.

22. Use sulfa drugs for added safeguard against peritoneal infection.

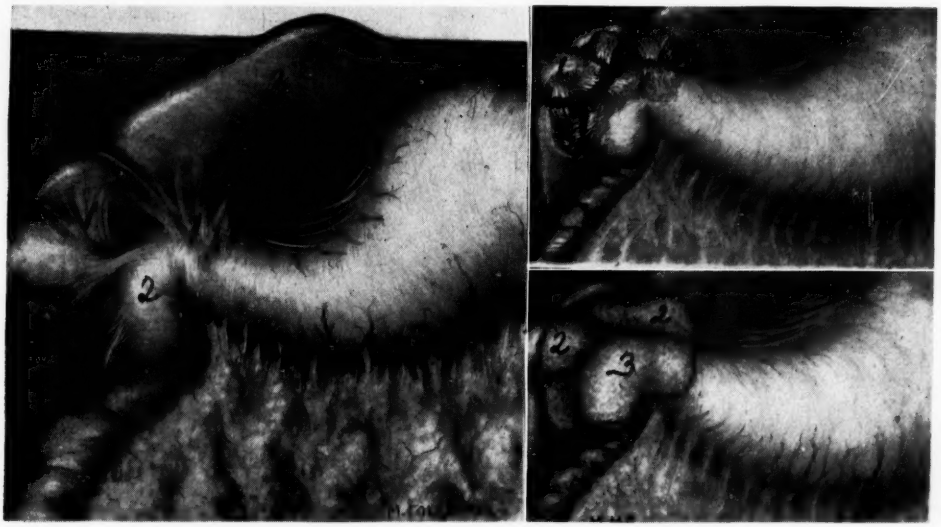

Fig. 9. *Case 9. Left:* 1. Massive adhesions attaching liver and gallbladder to duodenum and stomach; 2. Duodenum; 3. Left lobe of liver. *Right:* 1. Raw surfaces; 2. Flaps covering raw surfaces under liver; 3. Flaps covering raw surfaces over duodenum and pylorus.

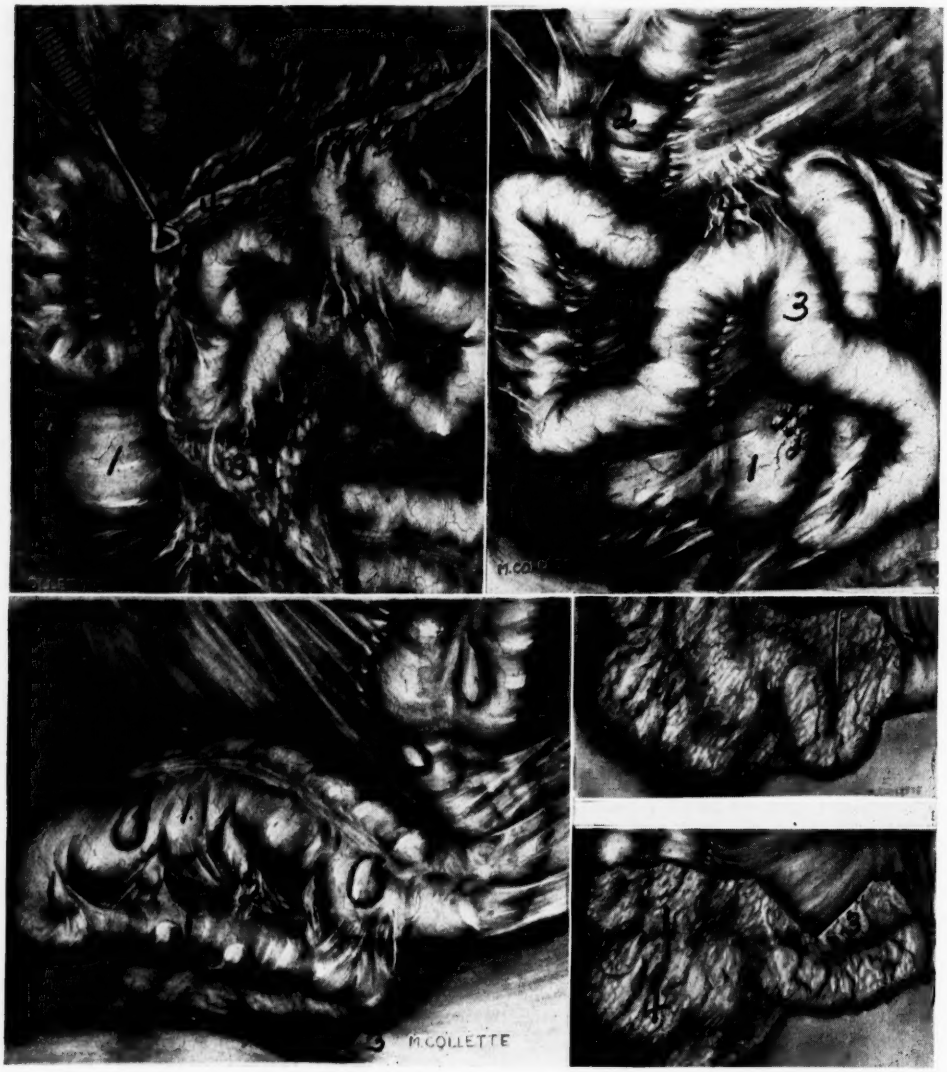

Fig. 10. *Case 10. Upper left:* 1. Cecum; 2. Loop of small bowel adherent over ascending colon; 3. Bands anchoring intestines into pelvis; 4. Great omentum being separated from adhesions to small bowel; 5. Adhesions between loops of small bowel. *Upper right:* 1. Cecum; 2. Ascending colon; 3. Small bowel; 4. Adhesions between loop of small bowel and ascending mesocolon. (Beginning of relief of adhesions by plastic repair.) *Lower left:* 1. Sigmoid; 2. Agglutination of sigmoid by bands; 3. Pelvic brim. *Lower right:* 1. Pad of fat; 2. Incision to allow freedom of terminal ileum; 3. Flap molded into place; 4. Raw surfaces completely covered by flap of fat and sutured in place. (In this case, it was impossible to cover raw surfaces of cecum in usual way. Pads of fat from omentum were detached and sutured over raw surfaces; to avoid any obstruction, incision was made to allow freedom of terminal ileum.)

The illustrations included in this paper, which were drawn by an anatomical artist in the operating room during the surgical procedure, are of a few of my private patients upon whom I performed plastic intra-abdominal repair.

The results in all of these, a number of which have been followed for as long as twenty-five years, were excellent; in some they exceeded even the hope of the operator. In this group are patients who had so-called "epileptic convulsions," "breast tumors" with bleeding from the nipples, mental disorders, thyroid dysfunction, etc., all of which were cured by proper attention to the gastro-intestinal tract, as described in this paper, followed by a reasonable length of time under medical care and supervision, to secure the full benefit of the operative repair.

SUMMARY

The use of plastic repair is usually thought of as being for cosmetic or economic purposes and confined to those parts of the anatomy that are visable to the public. Internal plastic repairs, however, may be equally or even more necessary to the physical, and even, in some cases, the mental, well-being of the individual.

The author cites numerous cases from his own experience and that of his associates, of the cure of conditions seemingly widely divergent in both cause and location (ex., breast masses erroneously diagnosed as carcinoma), by relatively simple plastic repairs within the abdominal and pelvic cavities. The illustrations are from his own cases, and were actually drawn in the operating room.

RÉSUMÉ

Les réparations plastiques sont le plus fréquement employées pour des raisons ou cosmètiques ou économiques, et presque toujours pour les régions anatomiques visibles au public. Les réparations plastiques internes sont également et parfois plus nécéssaires pour le bien-être mental et physique de l'individu.

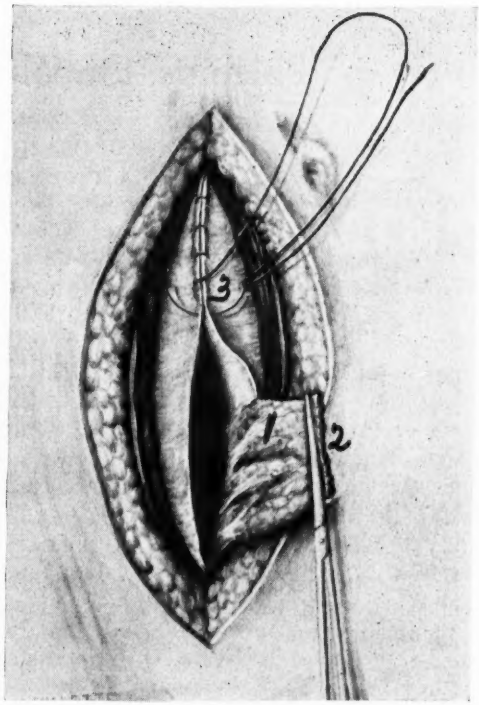

Fig. 11. *Case 11.* 1. Omental flap left attached to abdominal wall but separated from omentum; 2. Raw edge to be included in line of closure of abdominal incision; 3. Careful closing of peritoneum with raw edge turned out to safeguard against formation of adhesions.

L'auteur cite de nombreux cas de son expérience et de celle de ses associés de guérison de conditions dûes à différentes causes et de situation variée (ex. masses mammaires diagnostiquées carcinomes). Ces guérisons furent obténues par de simples porcédés opératoires intéressant les cavités abdominale et pelvienne. L'article est illustré et a rapport à des cas personnels.

RESUMEN

Corrientemente se estima que el uso de los arreglos plásticos se hace por motivos económicos o de embellecimiento y sólo en aquellas partes de la anatomía

(Continued on page 578)

Phlebitis, Embolism and Thrombosis

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THERE is a marked inter-relationship among the three conditions considered in the title of this article. It is often a conjecture on the part of the physician as to the lesion which primarily causes the symptoms. Phlebitis, or thrombophlebitis, from its terminology, is an inflammatory occlusive lesion of the vein. This causes an obstruction which may result in a thrombus. From the thrombus, an embolus develops. It is conceivable that the order of events may be reversed entirely if the embolus is dislodged from some area or surface. When an embolus reaches a vessel small enough to be occluded by it, a thrombus develops. If the thrombus is firmly established, it remains there. A small embolus may develop and occlude the circulation in any part of the body.

These emboli may occur where least expected. As a matter of fact, they are somewhat mysterious in their inception. In a so-called "clean case," one would not expect the occurrence of phlebitis.

Several years ago I did an interval operation upon an appendix. A week afterward the patient developed bilateral phlebitis, a rather unusual and infrequent complication following an abdominal operation. Instead of a convalescence of a week or ten days, it required some six to eight weeks before the patient was fit to leave the hospital. Both legs became swollen and for many years thereafter the patient was compelled to wear elastic stockings. His physical condition is similar to that found in "milk leg" after childbirth.

MESENTERIC THROMBOSIS

Mesenteric thrombosis occurs in a small percentage of cases. Its manifestations are often confused because the same symptoms occur in intestinal obstruction. In point of fact, a diagnosis of mesenteric thrombosis is rarely made. The abdominal symptoms, however, are so urgent that these cases are usually operated upon for intestinal obstruction. The illustration here shown is of a piece of gangrenous intestine which was removed from a patient suffering with asthma (fig. 1). He had all the symptoms typical of intestinal obstruction referred to above. Upon opening the abdomen the true condition became evident. After a resection of the gangrenous intestine, the patient made a good recovery.

AIR AND FAT EMBOLI

Air and fat emboli can be tragic occurrences because they may be responsible for sudden death. Fat embolism follows fractures and operations on the bones.

A few weeks ago, while performing a revision of a thoracoplasty for tuberculosis of the lungs, death occurred simultaneously with the accidental incision of the subclavian vein. Bleeding was easily controlled by a finger exerting slight pressure over the opening in the vein, but before a ligature could be applied the patient succumbed, as a result of an air embolus.

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THROMBOSIS OF THE ILIAC AND FEMORAL ARTERIES FOLLOWING OPERATIONS

Embolism and thrombosis may affect the arterial as well as the venous system. Spontaneous thrombosis of these vessels in medical conditions seems to be

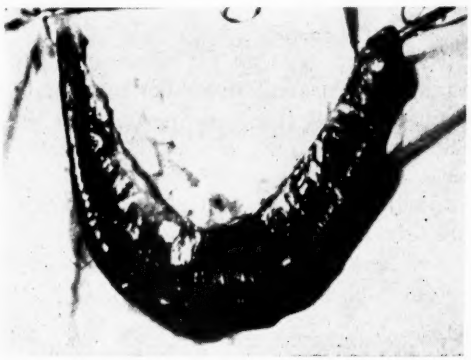

Fig. 1. Resection of ileum following mesenteric thrombosis.

rather more common than following operation. The symptoms are the same. Pain and swelling occur in the affected leg, followed by numbness, anesthesia and paresthesia of the skin. This is followed by a blanching of the extremity, and signs of beginning gangrene of the toes.

In almost four decades of active surgical practice, I have had only one experience with thrombosis of the iliac and femoral arteries following operation. The history of this case is as follows:

CASE REPORT

Case 1: E.M., male, age forty-seven, referred by Bernard Behrend, M.D., was admitted to the Jewish Hospital on July 12, 1944. He was operated upon for a right inguinal hernia by the McArthur technic. An appendectomy was also performed. For a week the patient enjoyed a normal convalescence, he was very active and taking plenty of exercise when suddenly he developed pain in the right leg. Not much cognizance was taken of this symptom until the leg became swollen with blanching of the skin. During the night and toward morning the symptoms increased.

He was operated upon and an incision was made in the femoral artery where a large blood clot was found. After removal of this clot no blood appeared, and the incision was extended up into the abdomen where the iliac arteries were exposed. (Fig. 2.) There was pulsation in the left iliac artery but none in the right. The clot was removed and the circulation was restored. Heparin was used during and after the operation. Unfortunately, all the peripheral arteries, including the anterior and posterior tibial arteries were

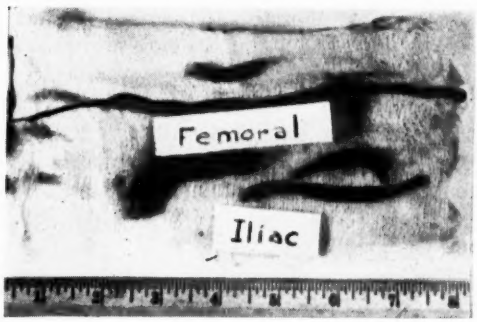

Fig. 2. *Case 1.* Thrombi removed from the iliac and femoral arteries in a patient operated upon for an inguinal hernia.

occluded. The patient died on July 21, about forty-eight hours after the embolectomy.

Bergqvist,[1] in reporting 2,767 inguinal hernias and 446 femoral hernias, was particularly interested to find out whether the thrombo-embolus was homolateral. He found that the incidence of thrombo-embolism was not directly traceable to the operative field.

Since an appendectomy was performed in the case reported above, it is interesting to note that Siebner[2] states that before 1932 there was only one other case of thrombolic or embolic obstruction of the right iliac artery and its branches. He reports a man fifty years of age who was operated upon for an embolus of the right femoral

artery. In spite of the embolectomy, the leg had to be amputated.

Thrombosis of the femoral artery may be expected at any time from a suppurative lesion. The occurrence is enhanced by arteriosclerosis of the blood vessels. In the patient above referred to, there was no suppuration, but he did have considerable arteriosclerosis in the iliac and femoral arteries. Williams [4] suggests that when arteriosclerosis is known to be present, it is best to take precautionary measures to prevent thrombosis.

de Takats [3] believes that a differentiation should be made between embolism and thrombosis and that an attempt should be made to localize the site of occlusion; that conservative measures may be used first, but if this fails, an embolectomy should be performed. He advises amputation if there is no adequate circulation. Early operation leads to reduction in mortality.

Harbitz [5] concentrates his observations on thrombo-embolism following hernia operations. He states that there is no essential difference in the frequency of thrombo-embolism in the two sexes. The side on which the operation is performed plays no part in regard to the location of the thrombus. In non-incarcerated inguinal hernias, the incidence of thrombo-embolism is relatively high in the lower age groups. Femoral hernias appear to be a group especially predisposed to thrombo-embolic complications. The mortality rate was high whenever a thrombo-embolus occurred following an operation for inguinal or femoral hernia.

PROPHYLAXIS

Deep breathing, leg and arm exercises, and frequent changing of the patient's position in bed, are measures supposed to be beneficial in the prevention of phlebitis, thrombosis and embolism. The advocates of early ambulation following an operation claim that there is less likelihood of these complications being engrafted on an abdominal operation. Experience has shown, however, that such phenomena occur notwithstanding all measures used to prevent these catastrophies in the blood vessels.

Huber [6] states that the unusually large number of cases of thrombosis following amputation of the breasts suggests that early rising following operation may not be a good prophylactic measure. The majority of these patients were up on the day after the operation.

The use of heparin and dicumarol as prophylactics in the prevention of thrombosis and embolism is not a logical procedure. It is impossible to prophesy the incidence of these complications in any operative patient. Lengthening of the coagulation time has led to inordinate loss of blood, necessitating blood transfusions and other supportive measures.

The discovery of heparin by Howell in 1918 opened a new era in the treatment of thrombosis of the blood vessels. Murray [7] reports that in 440 patients treated with heparin, thrombosis and embolism did not occur. Considerable improvement was derived with its use in patients suffering from thrombophlebitis and pulmonary embolism. Embolectomies were successful in twelve cases when heparin was used. He also suggested that heparin is an important agent for the prevention of thrombosis when operation for the repair of blood vessels is to be undertaken.

Ligation of the femoral veins to prevent pulmonary embolism preceding an operation is also a radical procedure not entirely without its dangers. In the hands of a competent surgeon, this is a comparatively easy procedure performed under local anesthesia. Ligation

of the inferior vena cava is an operation of considerable magnitude; it should not be contemplated except under the most exacting circumstances. Allen, Linton and Donaldson [8] claim that bilateral femoral vein interruption is a safe procedure, which will prevent massive pulmonary embolism. In one of our reported cases, pulmonary embolism did occur following bilateral ligation of the femoral veins. We advocate femoral vein ligation as a prophylactic measure for a few selected patients of advanced age. They (Allen, Linton and Donaldson) report 464 cases on whom femoral vein ligatiton was performed without a single death.

Payr,[9] in 1930, noticed an increase in the number of cases of thrombo-embolism. He advocated ligature of the vein above the thrombus and ligation of the femoral or iliac veins for prevention of pulmonary embolism. As early as 1938, Läwen [10] advocated ligation of the femoral and even the iliac veins to prevent pulmonary embolism.

ILLUSTRATIVE CASES

Case 2: M.B.R. Ligation of femoral veins was performed for the prevention of pulmonary embolism. One attack occurred after ligation.

Patient was a female, thirty-eight years old, referred by Harry F. Weber, M.D. She was admitted July 23, 1945 to the Jewish Hospital and discharged September 9. Her chief complaint was an umbilical hernia which she had noticed seven months before admission to the hospital. The hernia was incarcerated. Menstruation had always been irregular and she complained of leucorrhea. She had two children. The last child was born sixteen months ago. Physical examination revealed an extremely obese female, weighing around two hundred and fifty pounds. Her abdomen, the folds of which hung over the sides of the operating table, was huge.

Laboratory Reports: July 23. URINE EXAMINATION: React. acid. Sp. G. 1.017, Alb. neg., Sugar neg., Ac. neg., W.B.C. 6–8, Ep. 6–8. REPORT: Hb. 14 gm., R.B.C. 4.9, W.B.C. 9,500, Seg 74, St. 62 fil, 12 n.f. Ly. 21, Mono. 5 (August 4). Prothrombin time 88 per cent (August 8); Prothrombin time 35 per cent (August 9); Prothrombin time 19 per cent (August 13); Prothrombin time 82 per cent; icterus index 20; blood sugar 89.

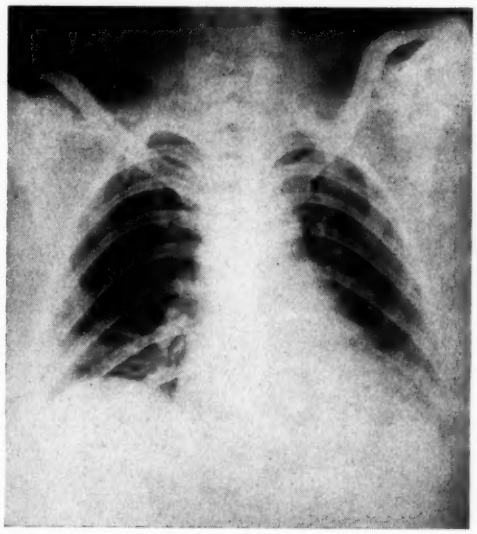

Fig. 3. *Case 2.* Bilateral basal pulmonary infarction following an operation for umbilical hernia.

X-Ray Report: Sept 1; 1 Chest: The right diaphragm is normally arched. The left is not definitely seen. The heart is normal in shape and configuration. The upper lobes are normally ventilated. The right lower lobe shows an irregular area of density originating near the cardiodiaphragmatic angle and radiating toward the lung periphery. A few striated shadows are noted above the area of density. The left lobe shows an irregular area of haziness as well as a partial obliteration of the costophrenic sulcus.

Conclusion: Bilateral basal pulmonary infarction. (Fig. 3.)

Electrocardiographic Diagnosis: Sept. 1; Simple tachycardia (120). The T-waves indicate myocardial damage.

On July 25, under spinal anesthesia, the hernia was repaired. Five days after opera-

tion the clips were removed. The wound apparently healed by first intention.

On August 2, at 8 P.M. the patient complained of chest pains and spitting of blood. She was found in very poor condition, perspiring and apparently dyspneic. There was no cyanosis but respirations were rapid. She complained of some obstruction to breathing. Examination revealed the blood pressure to be $\frac{70}{50}$ with a weak rapid pulse. Heart sounds were faint and rapid.

On August 3, at 4 A.M. the patient was in profound shock. She was pronounced "critical," placed in an oxygen tent and given plasma, papaverine and caffeine. Heparin was also given. By noon of the same day the patient had rallied somewhat, and her color was less dusky but there was still cyanosis. Dicumarol was added to the heparin. At 4 P.M. her temperature rose to 104°. Heart action was rapid and sounds were weak. Penicillin in 30,000 units every three hours was administered.

On August 6, the prothrombin time was 24 per cent and the dicumarol was stopped.

August 10, second attack of pulmonary embolism. The patient had exactly the same symptoms as in the first attack eight days previously. Heparin and dicumarol were renewed. Coramine and 500 c.c.'s of plasma were given.

August 27, third attack of pulmonary embolism. Symptoms and treatment were exactly the same as in the previous attacks.

On August 28, under local anesthesia, a bilateral femoral ligation was performed. The right common femoral vein and the left superficial femoral vein were ligated.

September 2, fourth attack of pulmonary embolism. It will be noted that this followed the operation for ligation of the veins on August 28. After this attack the patient made un uneventful recovery and was discharged from the hospital on September 9.

Comment: It has been stated in the literature that obese patients are more prone to attacks of pulmonary embolism than those of normal weight. But this case is particularly interesting because the ligation of the femoral veins was performed for the purpose of preventing further attacks of pulmonary embolism, of which she had had three, following an operation for an incarcerated umbilical hernia. Even after the ligation of the femoral veins, she had another attack of pulmonary embolism from which she recovered. A follow-up shows that this patient is now (Dec. 1945) enjoying good health.

Case 3: A.A.—Prophylactic ligation of femoral veins was performed prior to a one-stage colon resection and end-to-end anastomosis. The patient was sixty-five years old, female, and was admitted June 25, 1945 to the Mt. Sinai Hospital on the service of A. I. Rubenstone, M.D. She was discharged October 30. She complained of weakness, fatigue and the loss of twenty pounds in weight. About three months before admission, she had had an episode of diarrhea for ten days. There was no blood in the stools. A physical examination revealed nothing of any importance, except that in palpating the abdomen, a mass could be felt in the lower left quadrant. The diagnosis at this time was carcinoma of the sigmoid and descending colon; this was confirmed by roentgenogram.

I first saw this patient in consultation on July 13, when she was suffering from an acute thrombophlebitis of the left leg. Rest in bed and elevation of the leg were advised until the inflammation subsided, before any abdominal operation could be performed. Ligation of the femoral veins was advised first, before the resection of the colon.

Operations: On October 1, a bilateral ligation of the femoral veins was performed. On October 8, the sigmoid, descending colon, and a portion of the transverse colon were resected and an end-to-end anastomosis performed. There was nothing unusual following convalescence from these two operations.

The admission laboratory report was as follows: URINE EXAMINATION: June 25—Reac.—acid, Sp. G. 1026, no sugar, trace of albumen, urates and epithelium. Blood count June 25—5.8 gms. 40 per cent, R.B.C. 2,920, W.B.C. 10,000, Polys. 80, Ly. 18, Mono. 2. June 26, blood sugar 197. June 27, blood urea nitrogen 14.0 mg. per cent.

Comment: This patient was admitted with symptoms of carcinoma of the sigmoid and

descending colon, which was confirmed by the physical examination and roentgenograms. While she was in the hospital, she developed an acute thrombophlebitis. At that time we advised against any abdominal operation until the inflammation subsided. Furthermore, it was stated that no abdominal operation should be done until a bilateral ligation of the femoral veins was performed. This was accordingly carried out, and one week later the abdominal operation was done. The carcinoma of the colon was resected, followed by end-to-end anastomosis. A normal convalescence followed.

TREATMENT

There is a wide difference of opinion concerning the treatment of phlebitis, thrombosis and embolism. The so-called medical aspect with the use of heparin and dicumarol must receive consideration. Ligation of veins, such as the femoral and inferior vena cava, is not without danger. Ligation of the inferior vene cava for instance, is a serious matter. Single or double ligation of the femoral vein is not quite so dangerous, but still there have been fatalities following this operation. Pulmonary embolism may follow even ligation of these veins.

Phlebitis, thrombosis and embolism may be considered medical as well as surgical diseases. The incidence of pulmonary embolism following operations varies in the experience of individual surgeons. In my experience it is of comparatively rare occurrence. Coronary thrombosis, which we will not discuss here and which has taken toll of many of the younger generation, must be considered purely a medical problem. Pulmonary embolism has interest divided between both physician and surgeon. It may occur in the course of any medical condition; it may follow any type of surgical operation. It is a catastrophic accident, usually ending in the death of the patient. A few, however, have recovered, with or without treatment.

Medical treatment by means of heparin, dicumarol and papaverine is well known. Priestley and Barker[11] discuss particularly the use of heparin in the prevention of postoperative thrombosis and embolism. They prefer the continuous drip method to intermittent injections of heparin. In their experience, approximately six per cent of deaths resulting from pulmonary embolism follow operations. The majority of all thrombo-embolic phenomena occur within the first two weeks after operation. One-half of the patients who experience pulmonary embolism have a single non-fatal embolus, one-quarter have a single fatal embolist, and the remaining one-quarter have multiple emboli, which, in approximately sixty per cent of cases, are followed by fatal embolism. They claim the proper use of heparin should prevent one-third of the deaths which now occur from postoperative pulmonary embolism.

SUMMARY

There is a reawakening of the profession concerning the subject of phlebitis, embolism and thrombosis. It is now realized that it is not the benign pathological incident we once thought. The many papers that have been written on the subject in the past five years, make one take greater cognizance of this complication following surgical procedures. While many patients survive, many also die as a result of an embolus or thrombus lodged in some vital organ.

In conclusion:

1. The conditions discussed in this paper may have serious consequences.

2. Embolism and thrombosis may affect both the arterial and venous systems.

3. Exercises and early ambulation

after operation have not prevented these complications.

4. Ligation of the femoral veins to prevent pulmonary embolism is reviewed.

5. The question of heparin and dicumarol preoperatively versus ligation of the femoral veins is discussed.

6. Ligation of the femoral veins may be performed with impunity when necessary, because no untoward symptoms have resulted from this procedure.

RÉSUMÉ

Les sujets phlébite, embolie et thrombose attirent un renouveau d'attention du corps médical. Ce ne sont pas; comme on a cru dans le temps passé, des lésions bénignes. Durant les dernières cinq années, beaucoup de communications ont paru sur ces sujets. Quoique beaucoup de malades survivent, neamnoins beaucoup meurent d'embolie ou de thrombose située dans quelque organe vital.

L'embolisme, et la thrombose peuvent attaquer les systèmes artériel ou veneux. Les exercises et l'ambulation prècoce post-opératoires ne préviennent pas ces complications.

L'auteur passe en revue la ligature des veines fémorales pour prévenir l'embolisme pulmonaire et duo dicumérol. La ligature fémerale n'entraîne aucun symptôme défavorable.

RESUMEN

La profesión presta una atención renovada a la flebitis, embolia y trombosis. Ahora se da cuenta que no es el benigno caso patológico que se creía. En lo mucho que sobre estos asuntos se ha escrito en los últimos cinco años, se llega a un conocimiento mayor de las complicaciones que siguen a una intervención quirúrgica. Aunque muchos pacientes sanan totalmente, otros muchos mueren como consecuencia de un émbolo o un trombo alojado en algún órgano vital.

Las condiciones discutidas en este artículo pueden tener graves consecuencias. La embolia y la trombosis pueden afectar tanto al sistema arterial como al venoso. Los ejercicios y el hacer caminar al paciente poco después de la operación no han evitado estas complicaciones.

Se estudia también el asunto de ligar las venas femorales para evitar la embolia pulmonar. Compara el uso pre operatorio de la heparina y el dicumarol con el sistema de las ligaduras de las venas femorales; las ligaduras pueden efectuarse sin preocupación cuando sea necesario, ya que no se ha observado ningún síntoma adverso resultante de este procedimiento.

Свод

Наблюдается пробуждение профессионального интереса в предмете флебита, эмболизма и тромбоза. Мы теперь сознаем, что это не такой доброкачественный патологический инцидент, как мы когда-то думали. Большое количество литературы по этому предмету за последние пять лет заставляют нас приписать более серьезное значение этому послеоперативному осложнению.

Условия обсужденные в этой статье могут иметь серьезные последствия. Эмболизм и тромбоз могут повлиять, как и на артериальную, так и на венозную систему. Упражнения и ранняя послеоперативная амбуляция не предохранили от этого осложнения.

Обозрена лигация бедренных вен; обсуждено применение гепарина и dicumarol'a по сравнению с лигацией; лигация может быть произведена безнаказанно, когда нужно, так как никаких нежелательных симптомов этой мерой произведено не было.

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(Continued on page 562)

Some Items on the Treatment of Urethral Strictures:
A Simplified Operative Method for Impassable Strictures

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GENERALLY two methods of treatment of urethral strictures are available; gradual dilatation and surgery. The first way is perhaps the oldest urological instrumental treatment and has only changed, if at all, in the appliances used. The earliest attempts to deal with urethral strictures are recorded in Hindu writings dating from about the sixth century B.C. Susruta describes in the Ayurveda the treatment of urethral stricture by graduated dilatation by wood or metal instruments.

This intermittent treatment by means of dilatation obviates, in the majority of instances, an operation, provided the necessary patience on the part of both patient and urologist is exercised. It has to be borne in mind that the success of dilatation depends less on the mechanical stretching, than on the amount of resorption of scar tissue.

That is why we are using, in the last two decades, the interrupted dilatation, only in uncomplicated "benign" strictures with a good response to this kind of treatment. In the cases of "resilient" strictures we believe the best treatment is that by indwelling catheter. Already in the 18th century Dupuytren used an indwelling catheter or bougie and called this method "Vital dilatation." In this way the dilatation is produced slowly due to a continuous, gradually increasing pressure. The efficacy is enhanced by the constant presence of a foreign body. The latter leads, by its continuous contact with the urethral mucosa, to some hyperemia and edema of the strictured area in the first day. This condition subsides and an enormous softening and resorption of the scar tissues takes place; a fibrolysis changes its anatomical structure and we are usually able, in about a week's time, to increase the dilatation from a filiform bougie to a catheter of 16 to 18 F gauge, but it would be wrong to stop the treatment at this stage. On the contrary, the retained catheter is kept at least for another week. In pursuance of the loosening of the stricture, its eccentric or spiral form subsides gradually and a concentric urethra is moulded around the inlying catheter.

Of course it remains a kind of cicatrix: "once a stricture, always a stricture" is an old surgical axiom. However the normal shrinking tendency will only occur in a minor degree. We are able to control this process in an exact and evident manner by urethrography. This method must be used in every case of urethral stricture before deciding the kind of treatment, conservative or surgical. Only an exact and clear diagnosis in the case of stricture will guarantee the proper indication and choice of successful therapy, e.g. small peri-urethral abscesses will be recognized as the cause of a recurrent stricture.

If we have come to the conclusion that conservative treatment will lead to a poor result; if all our efforts to remedy by general management are fruitless, or complications appear, then there are three classic operations at our disposal:

1. *External Urethrotomy.*

In the tenth century Rhazes of Baghdad performed some sort of external urethrotomy. In 1730, a successful external urethrotomy was recorded by

Ledran, and the principle of urinary diversion recognized. In 1765, Hunter performed the urethrotomia externa by opening the dilated urethra behind the stricture and passing a bougie along the anterior urethra. He pierced the intervening scar tissue and fixed a catheter.

The external urethrotomy remained for a long time a common operation in strictures of the bulbo-membranous junction of the urethra; but often a suprapubic cystostomy became necessary in order to find the central end of the urethra "retrograde." That is why some urologists routinely perform preliminary suprepubic cystostomy. The difficulties of the urethrotomia externa without cystostomy are still further increased if we are operating on multiple strictures.

2. *Excision of the Strictures.*

This operation dates back to 1812, and was popularized towards the end of the nineteenth century. The frequent failures were only improved after the preliminary cystostomy recommended by Legueu. It should be remembered that a kind of plastic operation is performed in an area nearly always infected, and that the operation is generally followed by extensive adhesions. This operation is done by some urologists for short indurated strictures in the bulbo-membranous part of the urethra, sometimes connected with an urethral fistula.

3. *Urethrotomia Interna.*

Specimens of urethral instruments belonging to the Roman culture towards the last century B.C. and probably used for a sort of internal urethrotomy have been found in France. This procedure was for a long time forgotten and reappeared in France when this operation became established by Civiale in the nineteenth century. The urethrotomia interna is only possible in the absence of septic conditions. On the other hand, the value of this operation is much discussed and for a long time was condemned by some surgeons (H. Fenwick, Rubritius, etc.), and considered as "obsolete" by Eisendraht and Rolnick. This procedure recently achieved a sort of renaissance, especially in connection with the use of preliminary cystostomy; this latter safeguard will always be necessary in:

i. emergency cases of retention with impossibility of passing any instrument;

ii. strictures complicated by periurethral abscesses or fistulae;

iii. debilitated patients with signs of urosepsis.

Even in impassable strictures without the above complications, the cystostomy has the following advantages:

i. sometimes it is possible to pass a sound retrograde.

ii. control of potential concomitant pathological conditions at the neck of the bladder.

iii. due to the decongestant effect of the cystostomy, a formerly impassable stricture becomes passable after some days and a bougie may be introduced.

In the *Lancet,* Jan., 1921, W. F. Foster described the following way of retrograde catheterization. He introduces two metal catheters; one through the external orifice, and the other one through the internal meatus of the urethra. He then tries by pushing both towards the stricture to bring the tips of both catheters into contact. Kroiss (Vienna) in 1929 had the idea of replacing the retrograde catheter by the index finger in order to avoid injury of the adjacent rectum. He mentions the difficulties in fixing the rubber catheter to the tip of the metal sound, also those in withdrawing the connected catheter through the scar area. The catheter

is sometimes stripped and several attempts may have to be made.

I have made use for some time of the following method in cases of impassable stricture. A small suprapubic cystostomy is performed using peridural anesthesia. The index finger of the left hand is introduced into the posterior urethra. The right hand brings

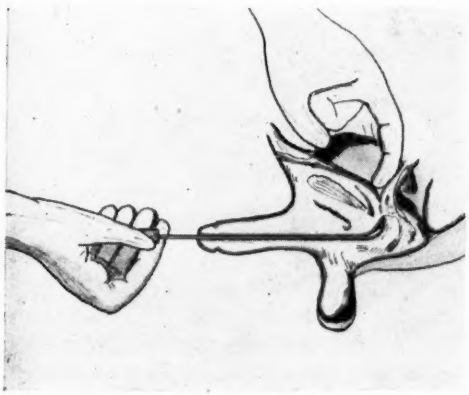

Fig. 1. Lithotrite arrested by strictured area. Index finger of left hand introduced in posterior urethra.

a small lithotrite (French gauge 0) through the external orifice into the urethra until it is arrested by the strictured area (fig. 1). By lowering the handle of the lithotrite the scar tissue is uplifted by the tip of the instrument; at the same time the index finger is pressed against the beak of the instrument by some coördinated boring movement in such a manner that the intervening scar tissue is compressed somewhat in an accordion fashion. In a short stricture one or two rotating movements of the finger are sufficient to make easy contact with the beak of the lithotrite (fig. 2). In this maneuver the cone-shaped tip and the furrow on the back of the lithotrite are of great assistance. Now, with the guidance of the forefinger, the instrument is directed into the bladder. We have now only to open the lithotrite to make the end of a catheter 15 or 16 F envelop the female jaw up to its heel, and by closing the instrument the catheter is firmly grasped (fig. 3). No fixation by ligature or other means is necessary. We do not run the risk of stripping the catheter while passing the strictured area. The catheter (Nelaton or Pezzer) remains for 12 to 14 days as an indwelling catheter according to the above mentioned general principles for treatment of urethral strictures.

This simplified method is especially useful in those cases where the general condition of the patient with impassable stricture does not allow more than a simple suprapubic cystostomy as a preliminary operation. In the second stage the excision of the wound is not necessary, and only sometimes a small enlargement of the latter is required, because this method allows a "blind" procedure which is practicable.

This operation has, in my opinion, a special value in cases of Bilharzia strictures of the urethra; for they are usually situated in the prostatic urethra, and concomitant with Bilharziasis of the bladder.

The method was performed in 15 cases of impassable strictures (traumatic, inflammatory and Bilharzia); the postoperative course was generally uneventful and the results very satisfactory.

SUMMARY

Following a brief historical review, the author outlines three classic operations for the relief of strictures of the urethra which have proven resistant to conservative methods of treatment. He then describes a procedure which he himself has used with success on a series of fifteen cases of impassable stricture (traumatic, inflammatory and Bilharzia).

RÉSUMÉ

Après une revue historique très brève, l'auteur nous décrit trois opérations classiques pour les rétrécissement de l'urèthre. Ces trois opérations n'ont pas été remplacés par les méthodes de traitement conservatrices. La méthods qu'il a employée dans une série de quinze câs de rétrécissement infranchissable de urèthre est décrite en detail (traumatique, inflammatoire et Bilharzie).

RESUMEN

Siguiendo un breve resúmen histórico, el autor pone de relieve tres operaciones clásicas para aliviar la estrechez uretral que ha resistido el tratamiento de los métodos conservadores. Describe el procedimiento que él mismo usó con éxito en una serie de quince casos de estrechez insuperable (traumática, inflamatoria y bilharziana).

Свод

После исторического обзора автор описывает три классические операции для такой стриктуры мочеиспускательного канала, которая не поддается консервативным способам лечения. Затем он описывает способ, который он успешно применил в 15 случаях непроходимой стриктуры (трауматической, воспалительной и при биларзите).

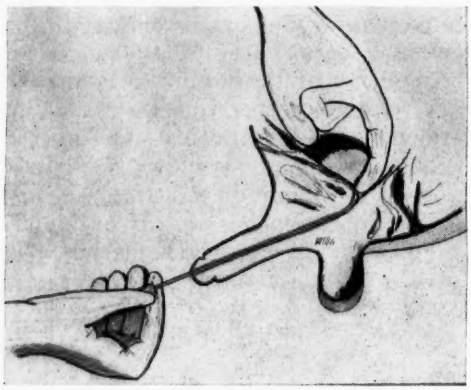

Fig. 2. By lowering handle of lithotrite, stricture is lifted. Index finger is pressed against beak of instrument.

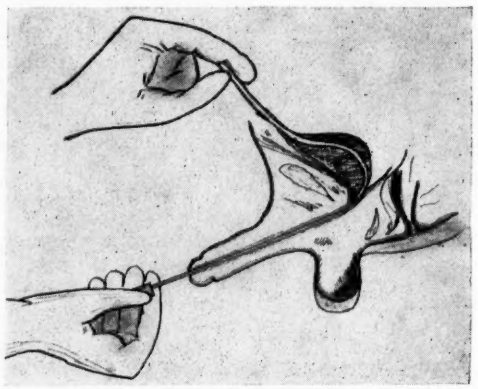

Fig. 3. End of catheter envelops female jaw of lithotrite; by closing instrument, catheter is firmly grasped.

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Editorials

Yesterday and Today

OUT of a vision and a purpose, eleven years ago, the International College of Surgeons was conceived and launched on its universal journey, to bring together in collaboration and brotherhood able proponents of the surgical art and science in all parts of the world; to safeguard the progress of specialization perpetuated for the benefit of mankind and for the encouragement and training of young surgeons.

The founders of this organization were gifted with the vision and the purpose which elaborated the unlimited and far reaching formula to organize something that never before had come into existence; for, while international surgical societies have gathered from time to time, the International College of Surgeons does not duplicate or conflict with any College, Association or Surgical Society in existence, since its required qualifications and objectives are primarily and preëminently international and universal, in order to attain the ideals of collaboration of the genius and talent inherent in all nationalities and peoples.

The past thirty-two years have witnessed the almost complete collapse of civilization in the ravages of two world wars; through their destructive forces we can discern a world-wide effort to organize politically, scientifically and socially towards better international understanding. The bitter lessons of these destructive conflicts, which we have endured for thirty-two years, have nevertheless brought advancement in the sciences; we are doubtless better prepared to cope with the demands of present and future generations than ever before in our history.

It is sad but true to realize at this moment that while the aggressive "or shooting war" throughout the world is over, or has ceased under command, yet the dove of peace is not with us; harsh as it may seem, today there is nothing less popular in the heart of mankind than peace. Even as grotesque as this assertion may seem, yet the fact remains that all negotiations and efforts for a peace seem to meet with little enthusiasm. The painfulness of the recollections of the horrors of the war and the pledges that it would never occur again seem to dim into insignificance against an inherent and devastating individual and national selfishness.

The starvation which follows the sanguinary destruction is none the less a demonstration of the great calamity we have endured and the far distant horizon for a virtual relief of the worldly chaos. Yet through all these facts and fancies, we see in the past thirty-two years a longing for international understanding and coöperation, however fruitless have been the efforts spent in this quest. The dominant need of humankind for better understanding and coöperation has never existed and never been felt as it is today; it is in this rôle, medically speaking, that surgery, through the creation and expansion of the International College of Surgeons is revealed and inspired.

To the handful of able, loyal, unselfish

founders of this organization, the International College of Surgeons, we are forever indebted. The vision, the purposes, the abnegation and devotion, sparing no personal or pecuniary sacrifice, have weathered all discouragement and opposition and witness daily the unconquerable progress, benefit and brilliant future assured by the International College of Surgeons. The guarantee of efficiency, ethics and Fellowships, the encouragement, education and training for the members and aspirants to the ideals and benefits to be derived from the efforts not only of the great founders of the organization but of the very many and able colleagues who are crowding around the original group demonstrate appreciation of the ideals and objectives of our organization.

Basically, the International College of Surgeons is a non-profit organization. To the small group of pioneers and founders we now bow and shall bow eternally in honor and appreciation of their efforts. Of great moment and concern to us all, in our early efforts, were the handicaps naturally brought about by the second World War, not only during its European and Far Eastern phases, but more especially at the close of 1941, when we in America were also forced to defend our rights, our democracy and our way of life. The military urgencies for increased power and efficiency, as well as for transportation within our own land, naturally came first. The continuance of our annual meetings, destined to maintain not only our contacts but the evolution of our program of national and international connections, became more and more, day by day, a problem threatening to set aside all of our efforts.

How to coöperate in the war effort, in the service of our nation and of humanity acutely strained our plans for the very many local and national, as well as International contacts, but with stout hearts and broad minds we aimed to maintain all-out war efforts at all cost and also to carry on the educational and basic objectives of the College by the national Guilds throughout the United States. These meetings, held from time to time, gave evidence of the interest of our growing membership and awakened unthought-of possibilities for the perpetuation of the academic and educational principles safeguarded by the College.

The test came however, when our annual Assemblies were planned and when the International conventions bi-annually strained our imagination and resources in order to comply with the constitutional set-up of our College. Right within our own membership, the stoutest opposition was developed by the wisest of our councellors who, with the very best of intentions, feared the handicaps of transportation, hotel accommodations, and the like, and discouraged our meetings. Providentially, however, we risked and won, for not once have we failed in the past eleven years to assemble nationally and internationally, as the occasion required, with results that were reassuring us to the wisdom of our resolutions, as shown by the brilliant results obtained at each and every meeting.

The objects and purposes of the International College of Surgeons, as its charter recites, are, "To gather together eminent surgeons of each nation, every state and dominion in the world, into one great organization, with the thought in view that the personal exchange of views of the leaders in surgery will do much to advance the science of surgery and also promote a better understanding between those who, in every country, are working for the good of humanity."

It is not only an ideal but a firm determination of the founders of the International College of Surgeons to keep up the standards of membership, requiring of new members that they be seasoned surgeons and that they aid younger men in every possible manner.

All aspirants to membership in our College must of course be *internationally minded* to meet the urge of higher aims in our organization as it reaches out to embrace advances in surgery throughout the world and by being essentially and unconditionally democratic in principle and practice, *it must recognize ability, character and reputation in the surgeons of every land.*

The International College of Surgeons requires, and will have, a home and an International Library, which will house contributions from all parts of the globe in the progress of surgical experience; and administrative offices for the efficient discharge of its vast responsibilities. It will be the home of the College and of its Chapters throughout the world, as well as the fountainhead for unlimited developments, with publicity through its journal, the "Journal of the International College of Surgeons" which, so ably edited, has already demonstrated its value as the watch-tower of cultural influence and the search-light for dissemination of information and ethical propaganda.

As a teaching organization, the Library shall possess the last word, authoritatively spoken, from all sources of investigation and research, as a guide and reference in all leading languages of the civilized world. In fact, the Library of the International College of Surgeons should shelter the written records of ancient as well as modern experience, a veritable *Serapium* or Museum of our science.

The wanton damage to the Hunterian Museum of the Royal College of Surgeons building in the late war, causing irreparable loss, was felt deeply by the scientific world, arousing our brotherhood to protest and indignation, and to aid in its restoration by generous gifts; the International College of Surgeons lost no time in doing its share, officially and by inviting the individual Fellowships to exercise their good-will and financial help, thus *appropriately expressing the warm sentiment and respect existing among surgeons* of the English speaking world.

The Secretariat is a veritable beehive and marvel of single-handed accomplishments and dynamic force which has done more for the conception, organization and actual success of the College than any other factor or factors, it being just and permissible to recognize in this a superlative personality, capable of extraordinary executive action and vast resourcefulness. The past, the present and the future owes this office candid acknowledgement for boundless achievements.

To meet the needs of our rapidly growing Junior membership, basic training facilities have been and are being utilized wherever and whenever possible for surgical residencies in accredited hospitals, and by Guilds, meeting regionally, under the interested and vigilant supervision of the Regents in the twenty-one districts which comprise the organization and set-up of the United States Chapter, have safeguarded and stimulated the high standards of membership required by the College. Thus the Board of Regents bears the burden and responsibility of the educational activities of the College, reinforced by the scrutiny of the Chapter Council for approval and for final recommendation to the Board of Trustees.

This scheme of organization, thus far, meets our actual needs and demands,

though we are alert to the wisdom of decentralization and of a system of checks and balances; for that purpose a special Committee has now under study a recommendation of the Boards of Examiners for candidates, as required by the Constitution and By-laws.

A suitable summary of the accomplishments of the International College of Surgeons in the past eleven years might be concisely the following:

1. The steady growth in the membership of the College from year to year, as revealed at each annual Assembly and Convocation, and the outstanding contributions to science and to surgery in particular, as vouched for and publicized by its JOURNAL.

2. The growth of foreign Chapters of the College throughout the world and the representation of the College by surgeons of distinction and reputation in countries where Chapters are under consideration. The enthusiasm existing in our European membership, notwithstanding the isolating and retarding influences resulting from war. In our western hemisphere, the Americas give inspiring proof of the soundness of Latin American solidarity and the pattern of our United States Chapter will grow effective by the existing collaboration, as demonstrated by the International Assembly in the City of Mexico in 1941 and at the International Assembly at Lima, Peru, in March, 1946, when the delegates of the International College were the guests of the national governments of Mexico and Peru.

3. The Convocations held in Florida in 1940, in Denver in 1942, in New York in 1943 and in Philadelphia in 1944, when, notwithstanding the difficulties of transportation and hotel reservations, coupled with almost mandatory discouragement by war priorities they were, nevertheless, signal successes as scientific contributions to the all-out war effort in defense of our liberties.

4. With our membership mounting and applications literally pouring into the Chapter's Business Office and the Secretariat of the International College, we are ever mindful of the success of our cause, purpose and ideals; with renewed vigor and prospects we look proudly on the past of our history and confidently on the future which lies before us.

DÉSIDERIO ROMÁN

En Avant!

THE International College of Surgeons was founded in Geneva, Switzerland in 1935, for the purpose of exchanging ideas and methods on scientific surgical subjects among competent surgeons throughout the world. In 1940, the College was chartered in Washington, D. C. and the United States Chapter, already a living, flourishing organization, began its march of progress to become one of the foremost surgical bodies of the world. The College is represented in twenty-seven countries and the membership in the United States Chapter alone is now nearing two thousand surgeons.

The call of the profession today is for leadership, intrepid and vocal for men who have the courage of their convictions to speak in defense of the ideology of our profession.

This has well been called the age of science. We are promised much for tomorrow as the result of the tremend-

ous advances during the past decade. Our ideals of scientific attainment never shall supplant the power of human kindness and human understanding for the neo-gods of so-called efficiency, nor shall we tolerate a charlatan leadership which would compromise the ideals of a scientific surgical organization to achieve a given constructive gain and which would then by appeasement surrender that gain.

The true character of a nation stems from its people. The true character of a surgeon stems from his heritage, his training, his integrity, his conscience. As a College we shall achieve such leadership as we deserve. If strong and aggressive in constructive thought and action, we shall keep faith with the yearning demand for international solidarity and friendship. If weak and selfish in sharing our achievements of science with our war-torn colleagues of other lands, ours shall become the vacillating symbol of pseudo-conception, an insecure foundation to uphold a structure of drifting decadence which we do not propose to encourage.

The surgeons of the world now turn to the profession in the Americas for professional guidance and assistance. Shall we fail them?

It is to be hoped that the science and art of surgery shall continue to progress with other scientific endeavors and that we never shall wilfully harbor a method of procedure which might be helpful to our confreres in other lands.

We as surgeons, members of an international organization, are interested in a government where the people's voice is supreme; where liberality of free speech and the open forum are recognized; where no power or combination of powers ever shall be able to shackle the progress of scientific advancement in either of the great empires of earth. Surgical advancement has been trampled under the foot of the military dictator and the great hospitals and universities have yielded their enviable positions to the prowess of might with an avowed objective to rule or destroy. Science has been diverted from a design of creation to help and to cure to a regrettable trend to retard and destroy. This colossal blunder has paid the dividends of poverty, shame, irretrievable position and remorse, and has turned backward the progress of science for many centuries.

The International College of Surgeons stands at the threshold of a challenging opportunity for promoting international good will and wholesome cooperative relationship among the medical and surgical fraternities, and among the nations of the world.

The daily contact of the physician with his patient brings him in touch with vast numbers of the world's population. It is a golden opportunity as well as a medium to spread the message of world amity and cooperation in a quiet but very effective way. This powerful force must never be discounted. Its potentialities are tremendous and may, with intelligent guidance, become a great constructive force or with a designing sinister leadership, may become equally destructive.

The International College of Surgeons is now growing so rapidly that a central office with unified direction of its various activities has become imperative.

Surgeons are making inquiries in many languages for abstracts of current literature, and are likewise sending reprints of their own articles to the College. We have received definite offers from several surgeons to donate their personal libraries, which to date will aggregate in excess of 6000 volumes.

It is proposed that the home and

library shall be the joint home of the International College of Surgeons and of the United States Chapter. The location of the International home may, of course, be changed at the will of the majority of the chapters throughout the world.

The location of such a home and library will be determined by a majority of the membership and the Executive Council together with a recommendation by the Board of Regents.

Finally I foresee for the International College of Surgeons continued growth and expansion wherever surgeons and men of global scope in their thinking are to be found. Neither the world nor the College shall harbor the outmoded isolationist with his subversive and selfish doctrines. We may therefore stand firm on the conviction that the International College of Surgeons has already achieved a place in the surgical world that we can all cherish—and cherishing, strive ever to guard, expand and improve.

HERBERT ACUFF

Early Ambulation

THE art and science of surgery represents the accumulated knowledge of centuries concerning those frailties of mankind which are amenable to treatment with the knife. Because of this hard-gained experience, surgery is not the sort of field in which each new idea is quickly seized upon at the expense of the old and well tried. It is the constant aim of scientific surgeons to maintain in a fine and delicate balance the acceptance of new principles and the abandonment of old ideas. When this balance is upset, we have as a result either the erratic and unsound enthusiast, or the stale, outmoded surgeon. In any given era both the ability of at least a segment of our profession to measure accurately, record painstakingly and draw conclusions wisely, and also the intellectual temper of the times play major rôles in determining the extent of progress in that era. Hence, for fourteen hundred years the precepts of the dogmatic and fanciful Galen were challenged by only a handful of men, notably Vesalius, Servetus and Harvey. These men were thought to be heretics because the Galenian system was followed religiously by all others.

Even in 1946 there are many similarities between religious systems and the professions, including medicine. Every profession and religion develops customs, traditions, habits and "window dressings." In time the "window dressings" are likely to be mistaken for the profession or religion. This is true of both Christianity and surgery. It is important in either case to distinguish between ultimate objectives and the means to those objectives. In surgery the cure of the patient or the alleviation of suffering is the goal to be attained. The high priests don proper garb. This is not the end, but a means to an end. In the recent past, the preparation of a patient for operation was not unlike preparation for a religious ceremony. The patient was purged with drastic drugs (which produced acute enteritis, itself a pathological condition; and in its wake there followed dehydration and distension of the abdomen with gas). In the operating theater, carbolic

and iodoform served as the incense. Following the operation, various quantities of intravenous fluids, enemata, opiates and sedatives and prolonged bed rest were prescribed religiously according to widely accepted but dogmatic and empirical principles. Probably the most widely accepted and the least questioned principle was that the patient should lie quietly in bed and splint the operative site for some time.

As early as 1899, Ries [1] introduced into the United States the idea of getting post-operative patients out of bed early. At that time the principles of antisepsis and anatomical closure of operative incisions were not well understood; eventrations following early ambulation soon led to the abandonment of the procedure. While some European surgeons were enthusiastic about their results with early ambulation, the method did not gain general acceptance.

It is to Leithauser of Saint Joseph's Mercy Hospital, Detroit, that we owe the revival of early rising and the first generally acceptable scientific study of its consequences. Like most investigators with a radical and unconventional idea, he met with resistance on the part of many of his colleagues when first trying to convince them of its virtues. It is greatly to his credit that his modest and sincere efforts, prompted by daring and imagination, led to such a strikingly clear and convincing study of his results that the principle has gained widespread interest and many adherents.

Every patient who now gets out of bed early after operation, and as a result avoids weakness, abdominal gas pains, constipation, urinary retention or the hazards of atelectasis, pneumonia and pulmonary embolism, owes his freedom from discomfort and, indeed, possibly his life to Leithauser's two original papers [2, 3] and to his motion picture studies.

The studies at our Clinic [4] have amply confirmed Leithauser's results. Such men as Lester R. Dragstedt and Paul W. Shafer, of the University of Chicago, have also employed early ambulation with equal success. At our clinic in the past three years, no patient getting out of bed within one or two days following operation has succumbed to pulmonary embolism, evisceration or other serious complication. We have found that the distressing sequelae following operation, such as gas pains, constipation, weakness and urinary retention, have been eliminated in these patients. Intravenous fluids in the average surgical patient have been replaced by oral fluids and food. Opiates, sedatives, laxatives, stomach intubations and bladder catheterizations have all but disappeared from our post-operative order sheets for the majority of surgical patients. Obviously there are definite and clear contraindications to early rising, such as shock, septicemia, phlebitis, and the like; these will always apply to an important minority of surgical patients.[4, 5] We have found early ambulation to be just as safe following gastric and colonic resections, thyroidectomies, radical mastectomies, vaginal hysterectomies and complicated gallbladder operations as it is following simple appendectomy.

The principle of early ambulation has not yet been accepted by all surgeons, but its adherents are growing in number. The tradition of prolonged bed rest is not easily overcome and some will cling tenaciously to the needless rituals which comprise "post-operative care" in so many patients. Those who examine the question on its merits will, I believe, come to discard the old principle for the new. With proper inci-

sions and sutures and the ever-present requisite of skillful technical surgery, with intelligent regard for the exceptions to the rule, with correction of operative shock and hemorrhage at their onset in the operating room (or before operation, if significant blood loss is anticipated) and with the spirit of inquiry, each surgeon should try getting his patients out of bed early after operation. Undoubtedly, most surgeons will find that Leithauser's teachings more nearly approach the truth than does our old tradition of splinting the operative site while the patient convalesces in bed for an unreasonable length of time.

ALEXANDER W. BLAIN

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Surgical Plagiarism*

Its Etiology, Manifestations, Prophylaxis and Cure

CONTROVERSIAL and parallel claims for credit for the origination of a technic, an instrument, a research process or product may have two distinct etiologies, the one benign, the other malignant. Two or more scientific men working independently may arrive at the same successful, original conclusion without either one knowing of the work of the other. Instances of such parallel discoveries are well established, even when a few years separate the announcements and the publication of results. In such instances laurels may have to be shared and there is understanding and commiseration for the one who just fails to attain priority because of an earlier pronouncement than his own report of independent, honest effort toward the same successful goal. The etiology here may be classed as benign. The prophylaxis and cure is comparatively painless and simple. The embarrassment of making claims for priority which cannot be substantiated may be avoided by carefully reviewing the literature, and consulting comprehensive indices of textbooks and journals before publication of any work.

However, there are individuals, we regret to state, who yearn to wear the laurels without running the race or who, like the kleptomaniac, gain satisfaction by stealing minor desirables even while enjoying a position of affluence. Such deliberately planned and perverted stealing—either of honors or goods—may be classed as malignant. Such individuals wear the brand of the thief, willing to steal from a professional colleague the honors and the rewards that are rightfully his, for honest, painstaking study and experimentation.

Literary plagiarism is by no means peculiar to medicine. Countless ex-

* Presented at the Tennessee Guild Meeting of the International College of Surgeons, U. S. Chapter, June 8, 1945.

amples of such piracy may be cited from various branches of science; countless more remain untold. It is becoming increasingly difficult to excuse or forgive the individual who makes a false claim to priority; there is no such thing as isolation in a world where intercommunication is a commonplace and the facilities for keeping informed on progress everywhere have so greatly multiplied. Even in an earlier day, history did not hesitate to point an accusing finger at the plagiarist.

German historians, especially Jackschath,[1] have accused Vesalius (b. Brussels, 1514 A.D.), generally conceded to be the father of modern anatomy, with the most barefaced and flagrant plagiarism and with appropriating the anatomic drawings of Leonardo Da Vinci and publishing them as his own (1513) in *De Corpa Humani Fabrica.*[2]

Vesalius, who conducted public dissections at Louvain and claimed priority in dissection on human cadavers, asserted that Galen (b. 130 A.D.) had practiced only animal dissection. Vesalius was in turn accused by Matteo Columbo, Eustachius and Arantius of having described organs of animals rather than humans.

Fielding Garrison[3] has stated that Leonardo Da Vinci was the first to study anatomy *de novo,* and that while, as a student, Vesalius may have seen some of Da Vinci's drawings, Vesari (*Lives of the Painters* published in 1550) is correct in attributing the drawings in Vesalius' book to Calcar. Neustatter[4] mentions an instance of plagiarism in which a monograph on "apholim," presented in 1685 by Jon. Jacobus Stolterfoht at the University of Wittenberg, appeared in 1701 under the name of the *praeses* Hardtschmidt, *with Stolterfoht's name completely eliminated.*

Priority claims for the discovery of oxygen are legion. Joseph Priestley, to whom credit is usually given,[5] obtained what he termed "depphlogisticated air" on August 1, 1774, and was the first to publish his findings. However, it is a matter of record that Carl Wilhelm Scheele (in 1772) and John Mayow (in 1674) also obtained oxygen. At the same time Mayow carried on experiments in respiration and combustion; it is to him that credit for the discovery should rightfully be given. Still another claimant for the honor was the great French scientist Antoine Laurent Lavoisier (1743–94). Profiting from false dates published in the *Memoirs of the Royal Academy of Sciences* and from the work of Pierre Bayen (1774), Lavoisier, to whom Priestley had communicated his method verbally while on a visit to Paris, claimed priority in obtaining oxygen.

To Daniel Rutherford (1772) has been attributed the honor of first preparing and studying nitrogen, but Henry Cavendish had independently obtained and studied this gas before Rutherford's report.

The year 1783 saw also the genesis in France of another bitter dispute between two scientific contemporaries, Pierre Bertholon (1742–1800) and Jean-Paul Marat (1743–1793), each of whom claimed priority in the field of experimentation in medical electricity. Marat is generally spoken of as the earliest investigator in this field, the contribution of Bertholon being generally forgotten, although he is mentioned in the *Traité d'electro-radiotherapie,* published under the direction of Delherm, Laquerriére, Morel-Kahn and Fischgold in 1938.

Bertholon, a friend of Benjamin Franklin, published the first edition of his book, entitled *"De L'Electricité du Corps Humain dans L'État de Santé et de Maladie,"* in 1781, his treatise

being honored by the Academy of Sciences of Lyon. A second edition was published in 1786. In this volume he not only mentions the different methods of application of electricity, but classifies diseases into those which are electric and nonelectric. In 1783 appeared Marat's *"Memoires sur L'Electricité Medicale,"* submitted anonymously and honored by the Academy of Rouen, which occasioned the accusations of plagiarism levelled against him. Bertholon's later writings contain several references to the *"falsifications de M. Marat."*[6]

Jose Luis Molinari has pointed out that a comparison of the writings of the two scientists will clearly demonstrate plagiarism on the part of Marat.[7] That Marat was conscious of the accusations of Bertholon and attempted to defend himself against them is evident from a letter dated December 20, 1783, written to Roume de St. Laurent, a letter in which Marat recapitulates the events that have befallen him since his entrance upon a scientific career.[8]

After stating that he has been calumnied, Marat mentions that among the different works on medical electricity which have appeared in various countries, *"that of Abbé Bertholon had achieved first rank.* . . . M. Bertholon had claimed that electricity was a universal remedy. This was not borne out by his experiments." "I presented an essay to the Academy (of Rouen). . . . I thought it my duty to attack all accepted systems, and in particular that of Abbé Bertholon, a member of nine learned societies. . . . This I did anonymously. . . . I learned that my *Memoire* was crowned."

The French Academy refused Marat recognition of his earlier experiments on fire, light and electricity in 1780. Soon after, in 1781, appeared the first edition of Abbé Bertholon's treatise on the medical uses of electricity. It was not until 1782 that Marat perfected his apparatus and gave treatments to a number of patients. It seems that Marat, embittered by the reception given his experiments by the Commissioners of the French Academy, was not averse to borrowing Bertholon's ideas on medical electricity and attempting to ensure for the Spanish Academy "the honor of giving to Europe the true theory of medical electricity."

One of the most valuable instruments known to laryngologists, the laryngoscope, has also one of the most disputed of origins. To whom do we owe it, to Czermak, to Babington or the Spanish singing teacher, Manuel Garcia? Czermak is generally assigned credit for its development, although Turck put forth claims to priority. Fielding Garrison favors the Spanish singing teacher, and Sir Morell Mackenzie, in Clendening's *Source Book of Medical History*,[9] accords Babington the honor. Levret (1743), Bozzini (1804) and Senn (1827) had made experiments in illuminating the body. It was Dr. Benjamin Guy Babington, however, who, in March 1829, exhibited at the Hunterian Society in London, an instrument closely resembling the laryngoscope now in use. In 1837, Liston described a method of exploring the larynx which, however, passed unnoticed. In November 1857, Prof. Czermak of Pesth "borrowed" the little mirrors invented but discarded as useless by Turck, and produced the modern laryngoscope.

Turning to another branch of surgery, the introduction of lithotrity occasioned a bitter dispute as to priority among Leroy d'Etoilles (1822), Civiale (1824) and Heurteloup (1824–31).

As long ago as 1803, there occurred one of the largest scale "steals" in the history of the profession . . . unsuccessful, however, since it was soon followed

by an *exposé* which had far reaching effects in a related branch of the science. I refer to Guillaume Dupuytren's (1770–1835) attempt to have himself proclaimed the founder of modern pathology in 1803, at the expense of the great French anatomist and physiologist, Marie François Xavier Bichat (1771–1802). Bichat having recently died, had thereby obligingly removed himself as a rival. When Bayle undertook to write up the work being done in pathology, Dupuytren demanded that dates of his own work be falsified so as to antedate that of Bichat, as E. Robert Wiese pointed out in his carefully documented article on Dupuytren.[10] "He demanded that Bayle acknowledge in each of the *Memoirs* spoken of, that the credit for writing thereof really belonged to him (Dupuytren), while, he, himself magnanimously wrote that he had authorized Bayle to publish them. The better to efface the anterior dates of Bichat, he produced Bichat's plans and principles in his lectures and palmed them off as his own, at the same time deliberately falsifying the dates of his own work." Laennec informed the Medical School Society of the facts, and the feeling aroused caused both Dupuytren and Laennec to abandon the field of pathology, thus delaying certain investigations in that field for a period of years.

Carl Ferdinand von Graefe (1787–1840) of Warsaw is generally acknowledged to have introduced rhinoplasty to the modern surgical profession in 1818,[11] simultaneously with Bunger, although credit for its revival belongs to Joseph Constantine Carpue (1816), who based his work on that of Branca of Catanea, first mentioned in a manuscript of 1442. Gabriel Fallopius (1523–1562) described the same method in *De Decoratione,* and Gaspar Tazliacozzo (Taliacotius) (1546–1599), professor of anatomy at Bologna, described Branca's operation in his work published in Venice in 1597. Interest in the method appeared to have died completely until resuscitated by Carpue.

Experimental embryology acknowledges Wilhelm Roux (1850–1924) [12] as the father of that science, but Roux's work was based upon the earlier experimentation of Eduard Pflüger (1829–1910) upon the frog's egg.

Two outstanding disputes from the field of gynecology and obstetrics are worthy of mention. Eugene Koeberlé,[13] pioneer in hysterectomy and *morcellement,* who excised the uterus for uterine fibroma (1863), the uterus and adnexa for tumor (1869) and performed the first myomectomy (1878), indulged in much bitter disputation with Jules Péan over priority in the invention and use of the hemostatic forceps.

John Braxton Hicks [14] (1825–97) of London is generally recognized as the initiator of *podalic version* by combined internal and external manipulation (1863). Hick's priority has been disputed in favor of Marmaduke Wright, who, however, employed or recommended external handling in cephalic version (1854).

It must be constantly borne in mind by the medical historian that he must be extremely cautious before making any charge of plagiarism against his *confrères,* for it is true that in many instances claims for priority have been put forward without the author's knowing that the same operation has been previously reported.

Such was the case in Nathan Smith's claims to the first ovariotomy,[15] which he performed in 1821, and reported in that year, with no knowledge that Ephraim McDowell had preceded him in December 1809, reporting his case in April 1817. Today McDowell is generally given credit for having performed the first ovariotomy.

A still more striking example is that of Amos Twitchell,[16] who, in 1843 published in the *New England Quarterly Journal of Medicine and Surgery* a paper on ligation of the common carotid, without being cognizant of the fact that Matthew Baillie (1789), Abernethy (1798), Mr. Fleming, a British naval surgeon (1803), Sir Astley Cooper (1805) and Mason F. Cogswell (1803) had performed the operation before him.

Simultaneously with Edoardo Bassini (1814–1924), William Stewart Halsted (1852–1922) devised the modern operation for hernia, known the world over as the Bassini operation.

The Hartley-Krause operation for *tic douloureux* is justly so named, for Hartley and Krause almost simultaneously devised a method of reaching the Gasserian ganglion by an intracranial route.

In the case of Bryant's operation for cistoid growth, Clairmont[17] reported from von Eiselberg's Clinic, an operation which combined the principles of Bryant's operation and incision.

One of the commonest and most frequently used of all surgical procedures, the McBurney incision in appendectomy, was undoubtedly antedated by L. L. McArthur in this country and Schindler in Europe. Binnie,[18] pointed out in 1921 that McArthur devised and carried out this muscle-splitting procedure in about thirty cases prior to publication of McBurney's method; McBurney was not acquainted with McArthur's work, which he had failed to publish promptly.

To whom shall credit be given for surgical correction of ptosis of the eyelids? DeLapersonne, Angelucci and Greening presented individual operations for the correction of ptosis, employing similar technics.[19] Greening's operation is a modification of De Grandemont's; in turn Galezowski's was a modification of Bowman's operation, which Bowman devised at the suggestion of vonGraefe. De Grandemont's technic was not dissimilar to that of Everbusch.

Robert Proust (1873–1935), who is generally credited with the first perineal prostatectomy, was inspired in his work by Guyon and his pupil Albarran,[20] so that the operation is more correctly known as the Proust-Albarran operation. It must be kept in mind, nevertheless, that Proust visited London to observe the success of Freyer's prostatectomy by way of the bladder, and returned to France to publicize the operation which was to dethrone his own.

Many instances of unintentional or unconscious plagiarism may be cited from the field of abdominal surgery. The urge to leave his name to posterity in connection with an operation is frequently only exceeded by the facility with which the surgeon borrows the work of a predecessor and adopts it for his own.

The Wölfler operation (1881), an anterior gastroenterostomy, was first suggested by Nicoladoni. Posterior gastroenterostomy, known as von Hacker's operation (1885), was based on the earlier work of Courvoisier (1882). The so-called Billroth I operation, first successfully performed in 1881, had been previously attempted—though not successfully—by Péan in 1879, and should more accurately be named the Péan-Billroth operation.[21]

Several instances of unintentional or unconscious adoption of another's operation are worthy of study at greater length. The so-called Mikulicz two-stage resection of the large bowel should more accurately be termed the Paul-Bloch-Mikulicz operation. Moynihan of London first pointed out that F. T. Paul of Liverpool described this

operation in the *British Medical Journal* in 1895,[22] in an article entitled "Colectomy." After describing the operation, step by step, Paul stated: "The second stage of the operation, that of breaking down the spur with an enterotome, should generally be undertaken about three weeks later." Again in the *British Medical Journal* in 1900,[23] Paul described three additional cases in which this method had been used, these added to the seven cases described in his previous article, bringing the total number of his cases to ten.

Further attempts to ascribe priority for this operation brought to light the fact that on Oct. 20, 1891, Oscar Bloch read a paper before the Surgical Society of Copenhagen on "Extra-abdominal Treatment of Intestinal Cancer (with the exception of the rectum)," in which the same method was described; this paper was published in two sections in the *Nord Medical Arkiv,* 1892 and abstracted in the *Zentralbl. f. Chir.,* in 1892.[24]

Also in 1892, Reclus and E. Forgue, who may not have known of Bloch's work, described two cases of exteriorization of the bowel and division of the mesocolon, followed by immediate resection of the tumor.

Mikulicz reported his two-stage resection of the large bowel before the Thirty-second Congress of German Surgeons in 1902, stating that he had performed this operation since 1898. This report was printed in the *Arch. f. klin. chir.*[25] Surgeons throughout the world have generally credited the operation to Mikulicz, but this is definitely an injustice to Bloch.[26] H. Hartman (1904) and Cruet (1914) (a pupil of E. Quenu), both described methods of exteriorization of the bowel, but credit for originating this operation belongs unreservedly to Oscar Bloch.

Another example is the Pólya operation[27] for implantation of the open stomach into the jejunum, which should in all fairness be attributed to Reichel, who first brought it to the attention of the surgical world in 1908. It was not until *three years later* that Pólya's description of the operation which bears his name was published.

Again, when referring to the operation of tubovalvular gastrostomy, some incline to give credit to Spivack. Scrutiny of the literature discloses that in 1929, Spivack wrote an article on a "new operation" which he claimed as his own.[28] Yet scientists now dead had described the principles of this operation from *16 to 35* years before Spivack.

The literature discloses that a continent valve had been made from mucous membrane of the stomach by L. Pénières in 1893.[29]

Pénières wrote:

> "A valve composed of mucous membrane fulfills its intended functions when it prevents the escape of gastric juice. This has been accomplished, for in our cases there has been neither inflamation nor ulceration of the skin which, indeed, proves our contentions that the gastric juice remained in the stomach and was not able to ecoriate or injure the skin."

It may be mentioned *pari passu* that Edmund and Wyllys Andrews of Northwestern University as far back as 1894, conducted experiments and published an article on "A New Method of Valvular Gastrostomy with a Mucous Membrane Lining"[30] in which they say:

> "A female dog weighing 45 pounds was subjected to this operation on April 5, 1894. There was no leakage of the contents of the stomach whatsoever; at the end of the month, she was in robust health and on being killed

May 4, the valve in the stomach was found in good working order.''

Spivack did not give a line of credit to those men.

A valve was formed of all the layers of the stomach by Fontan in 1896.[31] He says:

''I have conceived the idea of performing a valvular operation modifying it from the organic and surgical point of view. In my operation all layers of the stomach form the valve and not the musoca alone; secondly, I make the valve in one sitting in a very simple manner. . . . I can affirm absolutely that no gastric juices escape, following this operation.''

Note that the date when the valve was made from all layers of the stomach is 1896, *33 years before Spivack.*

It is, perhaps, well to recall in this connection what Petit de La Villeon [32] said at the meeting of the Society of Surgeons of Paris in 1931:

''I wish to express to you my gratitude for the honor and tribute paid at the National Academy of Surgery, so justly merited, to Prof. Fontan, the great surgeon and marvelous teacher at the Medical School of Toulon of which I had the great honor of having been a student. You all know Fontan's operation of gastrostomy by means of a valve. I have assisted him in this operation a number of times, and have followed the cases postoperatively. I can assure you that these gastrostomies are continent and that these patients do not walk around with catheters in their abdomens nor any other contrivance.

''They keep their catheters in their pockets and use them only when they feed themselves.

''Use Fontan's method which he discovered and you will assure a continent gastric opening.

''Gentlemen, this opportunity offered me to speak today fills me with emotion and pride to express credit to and recognition to the name of my late lamented master and I appreciate the gesture of this surgical society of Paris Surgeons and the rest of the great French surgical societies who have gathered here to pay homage to the name of Fontan.''

So much for the valve!

Dépage, a Belgian, and Janeway, an American, formed a tube from the anterior wall of the stomach lined with mucous membrane to provide a canal leading from the stomach to the skin surface in 1901 and 1913 respectively.[33–35]

Here again we find that the publications of Dépage and Janeway precede Spivack by *16 years, 26 years and 28 years respectively.*

The combination principle, that is, combining two different operations in gastrostomy, was originated by Watsudji [36] in 1894.

Watsudji combined the method of von Hacker with the Fontan technic in an operation stated to be unusually successful *thirty years before Spivack's article appeared.*

Because Spivack made use of the quarter-century-old tube technic of Dépage and Janeway, and the Pénières-Fontan valve, by a combination of the two, the bare facts unreservedly prove that he contributed *nothing* ''new'' or ''personal'' where the principles of tubovalvular gastrostomy are concerned.

Spivack rode into the literature in 1929 on a chariot drawn by nine experimental dogs, proclaiming a *''new''* (?) and *''personal''* (?) operation, without having performed it on a single human being living or dead. The Spivack chimera deserves prompt purging from the pages of originality.

Furthermore, it seems degrading to the memory of the pioneers to permit their labors to be camouflaged with the varnish of confusing verbosity, or minor changes here and there, thus foisting a ''new operation'' upon the surgical pro-

fession. However, there is comfort in the thought that surgical records defy the teeth of time and eventually and inexorably destroy the ambitions of those who falsely claim originality.

What then can we do to discourage such deliberate surgical plagiarists and medico-literary pirates? Great care has been taken to "quote chapter and verse" in the preceding examples, because it is peculiarly the duty of contemporaries to clear up questionable claims of this kind. Frequent reiteration of a claim, no matter how false, may lead others carelessly to accept and repeat, until at a later time the matter may remain confused. Even Hitler knew this! It is also high time that attention be given, not only to the cure or extirpation of crimes and errors committed, but to prophylaxis. I propose, therefore, that:

1. The Oath of Hippocrates be amended by incorporating the admonition of Augustus Toplady, to wit:

> "Keep your hands from literary pilfering and stealing. But if you cannot refrain from this kind of stealth, abstain from murdering what you steal";

2. Prompt attention of the profession be called to attempts at surgical plagiarism and the culprit be unmasked;

3. Advantage be taken of the functions of the Board of Documentation of Surgical Priorities of the International College of Surgeons, now in the process of formation, to establish priorities of surgical procedures and instruments; and

4. The need of a thorough search of the literature before we permit ourselves to record as *new* any surgical procedure, be stressed and restated on every occasion.

SUMMARY

1. Instances are cited from medical literature of both unconscious and deliberate plagiarism.

2. It is well to remember that, before an attempt is made to describe a new operation, a painstaking and thorough search of the literature should be made.

3. Examples of attempts to appropriate credit for new operations are cited.

MAX THOREK

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que están a la vista. No obstante, las reparaciones plásticas internas pueden ser igualmente necesarias al organismo y aún en ciertos casos al bienestar mental del individuo.

El autor cita muchos casos de su propia experiencia y de la de sus colegas en curas de condiciones, al parecer, muy divergente respecto a la causa y lococión (por ejemplo, las protuberancias del pecho diagnosticadas erróneamente como carcinoma) mediante una reparación plástica relativamente sencilla dentro de las cavidades abdominal y pélvicas. Las ilustraciones de las casos en que intervino personalmente fueron dibujada en la propia sala de operaciones.

Свод

Обыкновенно думают, что пластика предпринимается только для косметических или экономических целей и, что ее применение ограничено видными частями тела. А между тем, внутренняя пластика может быть так же или более необходима для физического и даже, в некоторых случаях, умственного здоровья.

Автор приводит многочисленные случаи из своего опыта и опыта его коллег, демонстрирующие вылечивание условий, кажущимися очень далекими по причине и локализации (напр. грудные массы ошибочно диагностированные как рак), сравнительно простой пластикой внутри брюшной или тазовой области. Иллюстрации его случаев были нарисованы в операционной.

A Late Effect of Radiotherapy upon the Intestine

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TWO cases are reported herewith in which, following deep radiotherapy to the abdominal cavity, there were unusual late vascular lesions which led to constrictive sclerotic and/or gangrenous lesions of the bowel.

CASE 1

This case occurred in my private and hospital practice about 15 years ago. A man in his late thirties was operated upon for a carcinoma of the ascending colon and a resection of the latter with immediate anastomosis of the stump of the ileum to the transverse colon was done. The patient made an excellent recovery. Thereafter he was given an intensive course of radiotherapy by a very competent radiotherapeutist. During the first year, the course was repeated twice.

One year later he was admitted to the hospital for acute abdominal symptoms with obstruction. At operation, a rather long segment of the small intestine was shrivelled down to a very narrow caliber. The wall of the gut and the adjacent appropriate mesentery were intensely sclerotic. The cut section and edge bled poorly. The larger blood vessels showed extensive disease and the small vessels were difficult to find in the sclerotic tissue. The convolutions were extensively and densely adherent to one another and parts were gangrenous. The loop was resected. The patient did not do well after operation and died several days later.

The post-mortem examination confirmed the operative findings and showed in addition a marked athero-sclerotic obliterating process in most of the blood vessels of the mesentery leading to the resected area.

CASE 2

In March 1945, the patient, then in his early fifties, was operated upon for a carcinoma of the sigmoid. A resection with immediate end-to-end anastomosis was done. As far as one could tell macroscopically, the blood vessels of the mesentery were as normal as one could expect them to be in an individual of his age, and, at the site of resection, the cut blood vessels looked normal and bled freely. The man made a good recovery and was discharged from the hospital well and with the wound healed.

Thereafter he was given one uncompleted course of radiotherapy.

In December 1945, while walking on the street, he was suddenly seized with severe abdominal pain and cramps. The pain continued and increased in intensity and he vomited. He was immediately hospitalized. There was good bowel function at first, and, because of that and of the subsidence of his symptoms temporarily, he was merely placed under observation. The symptoms then returned and an exploratory operation was done.

At operation, a loop of small intestine was found adherent to the site of the previous operation. The loop was also doubled on itself and extensively adherent. The root of the mesenteric attachment at this point was infiltrated and thickened, but there was no band or twist or other mechanical interference with the lumen of the bowel here except that it was much narrowed. The loop was gangrenous and it was resected with immediate anastomosis. The mesentery at the point of division bled poorly. The patient did not do well after operation and died several days later.

There was no post-mortem examination. The resected loop showed extensive infarction.

DISCUSSION

In both of these patients, there was no evidence before operation of any cardio-vascular disease or of any hypertension. It seems therefore that the abdominal lesion had no relation to any such vascular abnormality and was a local effect.

In the first case, the lesion was a very wide one and the shrivelled appearance of the intestine was undoubtedly due to a long-continued, chronic interference with the circulation. There was a very

much smaller involvement in the second case; the gross appearance of the damaged loops did not resemble that of the first case. In neither case was there any demonstrable band or adhesion or any other extrinsic mechanical factor which might suffice mechanically to obstruct the loop. It seemed clear that the lesion was an intrinsic one. The intestine at the primary resection was grossly normal and the appropriate mesenteric vessels gave no visible or palpatory evidence of disease. It must be concluded, therefore, that whatever lesion developed was a subsequent postoperative phenomenon.

The one extraordinary factor introduced after operation is the radiotherapy. It is well known that one of the effects of the latter is an obliteration of the small blood vessels which it reaches. This is probably the cause of any subsequent blood vessel lesions in the mesentery, of any gangrenous process in short lived and more rapidly developing cases, and of the shrivelled bowel in slowly developing and more chronic cases.

There is a discrepancy in the size and concentration of the dose of X-rays which were delivered in each case. In the first case, the dose was large both in amount and in concentration, and, in addition the therapy was repeated. There is no doubt that this subject received a maximal total dose. In the second case, the therapy was begun with a fair amount of concentration, but when only partially completed, the patient elected to discontinue the radiotherapy, because of various rumors which he had heard about other so-called "well-founded" methods of preventive therapy. This patient received a much smaller total dose than the first one. I am unable to say whether any personal idiosyncrasy, as regards reaction to exposure to radiotherapy, might have been operative. But the character of the demonstrated lesion, could be regarded as an early effect, which, if it had been further developed, might eventually have terminated in the same sclerotic, shrivelled intestine which was present in the first case.

SUMMARY

Two cases are reported in which, following postoperative prophylactic deep radiotherapy to the abdominal cavity after resection of the bowel for carcinoma, there were late vascular sclerotic constrictive and/or gangrenous lesions of the bowel. Both cases terminated fatally.

RÉSUMÉ

L'auteur rapporte deux cas dans lesquells fut employée post-opérativement la radiotherapie profonde prophylactique à l'abdomen, après résection de l'intestin pour carcinome. Il y eut brève survie. A l'autopsie, on découvrit dans les deux cas des lesions vasculaires sclérotiques, constrictives et gangréneuses de l'intestin.

RESUMEN

Si informa de dos casos de resección de intestino debido a carcinoma en los cuales se aplicó una radioterapia postoperativa profiláctica muy profunda. Después se encontró que había lesiones vasculares esclerosas constrictivas o gangrenosas, o todas ellas, en el intestino operado. En ambos casos, las consecuencias fueron fatales.

Свод

Сосудисто-склерозные стягивающие и гангренозные поражения кишечника были найдены в двух случаях по послеоперативной профилактической радиотерапии живота, после резекции рака кишечника. Оба больные умерли.

The Treatment of Chronic Osteomyelitis

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THE high casualty, low mortality rate in the Second World War War has brought the medical profession one of its greatest problems, chronic osteomyelitis. It is advisable for the doctor to prepare to see thousands of cripples, men who have been grievously hurt, men with chronic bone infections. They are now leaving the service for home to flood the doctors' offices and the hospitals. They do not want to be shunned; they do not want sympathy. They merely ask that they be restored to a healthy, useful life. If the medical profession fail these men, the disgrace would be unforgivable.

The bones of man for geologic ages have been subject to invasion by microorganisms. Osteomyelitis has been mentioned in the literature with ever increasing frequency since the invention of writing. The first effective treatment was rendered by primitive man when a sequestrum was removed by a thorn. Marked improvement in instruments followed century after century—they became sharper, longer and even shiny—but no improvement in the results was noted until the First World War. The fundamental surgical principles established during that period cannot be challenged.

The sequestra were removed along with the sinuses, granulation tissue, and infected bone cavities. Baer, Orr, Loehr, Albee, and Stewart developed methods of management which threw valuable light on these fundamentals of treatment. Baer advocated maggots; Orr, adequate drainage and prolonged rest; Loehr, cod liver oil and plaster of paris; Albee, bacteriophage; and Stewart, trinitrophenol glycerin and calcium carbonate.

The introduction of the sulfonamides [1, 2, 4] and penicillin [3, 4, 5] has greatly stimulated the attack on the specific causative organisms in the treatment of chronic osteomyelitis. The results have not been dramatic, but are encouraging. Penicillin is undoubtedly the most valuable of the chemotherapeutic agents. It is capable of inhibiting the growth of staphylococci in broth dilution of one to eighty-two thousand.[6, 7] It is practically nontoxic even in maximum therapeutic doses and gives promise of being the specific drug in treatment of a majority of cases of osteomyelitis.

PROCEDURE

One hundred and forty cases of chronic osteomyelitis resulting from war wounds were studied. All cases received adequate surgical treatment by removal of sequestra, sinuses, granulation tissue, and infected bone cavities as indicated for the individual patient (Table 1).

Table 1. LOCATION OF INFECTIONS IN ORDER OF FREQUENCY OF OCCURRENCE

1. Femur	7. Metacarpals
2. Humerus	8. Os calcis
3. Tibia	9. Ulna
4. Radius	10. Pelvis
5. Phalanges	11. Metatarsals
6. Fibula	12. Tarsals

One hundred of the total, who had organisms sensitive to penicillin, were given forty to fifty thousand units of sodium penicillin every three hours, and had from one hundred to four hundred thousand units introduced dry into the wound, depending on its size, at the time

of operation. The local treatment was continued daily in those wounds which could not be adequately closed due to the size of the defect. Care was taken to see that the powder was not wasted on the skin or superficial tissue.

Cultures were taken from the depths of the sinuses using care to prevent contamination from microörganisms on the skin. Cultures were repeated at operation and a portion of the infected bone used as a specimen. Cultures thus taken produced different predominating organisms; however, the latter method was thought to be more accurate and proved to be so by experience. Nevertheless, many patients with cultures reported nonsensitive to penicillin and the sulfonamides were given a therapeutic test of penicillin for a week or ten days. If the wounds showed definite signs of responding to the penicillin—and occasionally that did occur—the patient was given the benefit of this powerful chemotherapeutic agent also.

The penicillin sensitivity test used was simple. To a bottle of one hundred thousand units of sodium penicillin, 20 cc. of sterile distilled water was added, which gave a dilution of 5,000 units per cc. Under sterile conditions, ½ cc. of this solution was diluted with 50 cc. of sterile saline. Then 1 cc. of this 50 units per cc. was taken and again diluted with 49 cc. of brain heart infusion medium. This medium was made by adding 0.5 gm. of bacto-agar and 5 cc. of water to 1.0 gm. of brain heart infusion.

Trench plates were prepared by removing a groove 1 cm. in width down the center of a fresh blood plate. The groove was replaced with the infusion media containing one unit of penicillin per cubic centimeter, and the organisms to be tested were subcultured by streaking across the trench plate. Sensitive organisms failed to grow within 1 mm. of either side of the groove. Nonsensitive organisms grew over the groove.

Meticulous attention was given to the general condition of the patients with chronic osteomyelitis. The emaciated, septic, demoralized patients were improved with blood transfusions. Eggnogs were given twice daily at 10 a. m. and 3 p. m., and the patients were encouraged to eat extra meat, which was added to their regular diet. The easily available essential amino acids, calcium and phosphorus in this food, and added vitamins in the form of capsules once daily, were given to improve the healing rate and thereby the morale of these men. Psychiatric and medical consultations were requested as indicated.

Fig. 1. Shows surgical reconstruction of fingers following traumatic osteomyelitis of 94 days' duration. Forty thousand units of penicillin given every 3 hours for 86 weeks prior to healing of wounds, and for 2 weeks after each of two surgical reconstructive procedures. Function of fingers restored to normal; patient returned to full military duty.

A study was made of sixty cases with osteomyelitis which had been healed for a period of six to twelve weeks. These patients were then operated for the deformities produced by their injuries and resulting infection. Skin grafts, bone grafts, arthroplasties, arthrodesis, tenorrhaphies and neurolyses cover the majority of surgical reconstructive procedures used (see illustrative cases).

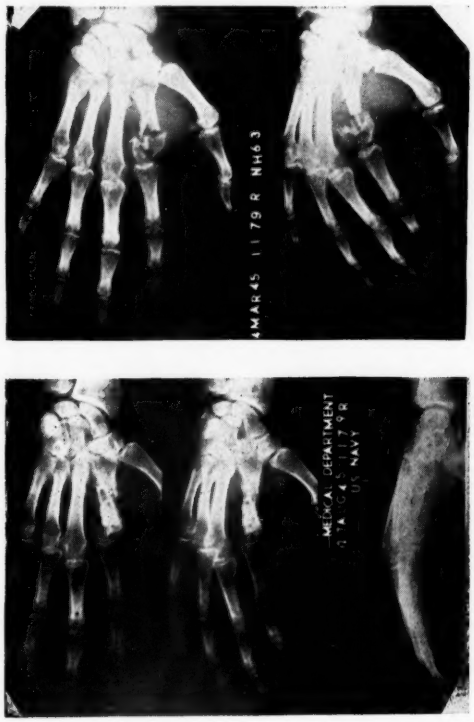

Fig. 2. Reconstruction of metacarpal following traumatic osteomyelitis of 8 months' duration. Forty thousand units of penicillin given every 3 hours for 3 weeks prior to healing of bone infection. Six weeks later, bone graft from fibula was done and penicillin again given for 14 days. Function of hand on discharge, 90 per cent of normal.

These sixty cases were divided into three groups.

The first group consisted of twenty patients from the hundred who received forty to fifty thousand units of sodium penicillin intramuscularly every three hours. The same dosage of penicillin was resumed at the time of operation and continued for two weeks afterwards.

The second group of twenty patients had microörganisms in their infections sensitive to sulfadiazine and received only sulfadiazine in doses of 1 gram every four hours, night and day, until the drainage had ceased and the bone infection had apparently healed. The same therapy was started again and continued for two weeks after the operative repair of the deformities.

The injuries of the remaining twenty patients who were subjected to these operative procedures, had healed without the use of any chemotherapeutic agent. The records showed that the wounds had contained pathogenic bacteria sensitive to penicillin or sulfadiazine, or both. Ten of these, who had microörganisms sensitive to penicillin were given this drug, as were the first group, except that the dosage was reduced to fifteen to twenty-five thousand units and continued for fourteen days after the operation. The last ten of the sixty patients studied following surgical reconstruction were given sulfadiazine as outlined above.

RESULTS

The wounds of ninety-four of the hundred cases treated with forty to fifty thousand units of penicillin every three hours, healed and remained healed after an average period of observation of seventy-five days (Table 2).

Table 2. Duration of Observation After Cessation of Drainage.

Shortest period	30 days
Average period	75 days
Longest period	146 days

The shortest period of observation after the wounds had healed was thirty days, the longest one hundred and

forty-six days. The average duration of treatment with this dosage of sodium penicillin was sixty-six days. The shortest period was thirteen days and the longest was one hundred and fifty days (Table 3).

Table 3. Duration of Penicillin Treatment.

Shortest period	13 days
Average period	66 days
Longest period	150 days

The predominating microörganisms were staphylococci in eighty-nine cases, streptococci in six, escherichia coli in two, and proteus vulgaris in three (Table 4 and Table 5).

Table 4. Predominating Microörganisms in 100 Cases.

Staphylococci	89
Escherichia coli	2
Streptococci	6
Proteus vulgaris	3

Table 5. Duration of Infection Before Treatment.

Shortest period	46 days
Average period	130 days
Longest period	300 days

Most cases, in spite of precautions in taking a culture, revealed two or more organisms, which may have been due to a mixed infection or to contamination. The two cases with escherichia coli and the three with proteus vulgaris were all reported with staphylococci; since all five cases promptly responded to penicillin therapy, it was thought that the penicillin-sensitive staphylococci were the cause of the bone infections. The escherichia coli and proteus vulgaris are

Fig. 3. Reconstruction of humerus following traumatic osteomyelitis of 4 months' duration. Fifty thousand units of penicillin every 3 hours for 13 days induced healing. Tibial bone graft was done 6 weeks later with penicillin resumed for 14 days. Healing satisfactory with no recurrence after 5 months.

of low virulence, with capacity to penetrate and subsist only in a host with a low defensive mechanism.

The twenty patients in this series who were later operated because of various deformities, yielded sterile cultures from specimens taken from the previous site of infection. None showed any sign of recurrence of the bone infection and the surgical wounds healed by primary intention.

The twenty patients who had received sulfadiazine and were operated upon in a similar manner did not have such a favorable outcome. Only thirteen showed healing by primary intention; four after a variable period of drainage. The wounds of the remaining three continued to drain and form bone sequestrae during the period of observation.

Of the ten patients who received sulfadiazine initially for two weeks following operative repair of their defects, the wounds of seven healed without any sign of recurrence of their osteomyelitis. Three developed draining sinuses which, however, eventually healed without resort to further surgical procedure.

The ten who received sodium penicillin in doses of fifteen to twenty-five thousand units every three hours intramuscularly, showed the poorest results. Only four of these patients had their operative wounds heal by first intention. Sinuses and sequestrae developed in three who required additional sequestrectomies and excision of the infected tissues. Two others will eventually require this procedure, and the wound of the last of the six, who had a recurrence of the infection, finally healed without interference.

DISCUSSION

One hundred and forty cases with chronic bone infections following trauma, were studied. Sodium penicillin in the dosage of forty to fifty thousand units intramuscularly every three hours, was of definite therapeutic benefit. The infections subsided and the wounds healed, permitting surgical correction of the deformities within six weeks. This saved from five to twenty-four months, the usual recommended interval between the healing of osteomyelitis and any surgical reconstruction for the patient's defects.

Sodium penicillin in lesser doses failed to prevent recurrent attacks of osteomyelitis in these cases, when the patients were subject to operative procedures within six weeks after the wounds had healed and the bone infection had subsided. Sulfadiazine also permitted a large percentage of recurrences of the infection after operation (Fig. 1).

The penicillin in doses of fifteen to twenty-five thousand units, not only failed to prevent recurrent attacks of osteomyelitis, but seemed to be harmful, in that the microörganisms developed a tolerance for this drug. When doses of forty to fifty thousand units were later given these cases, no effect whatever was noted on the virulence of the infection.

Besides the pathogenicity of the microörganisms in the wounds, many other factors influenced the healing rate.[8] Not the least of these was the state of nutrition of the patients. Most of the patients in this study were suffering from a variable degree of emaciation, secondary anemia and anorexia.

Whole eggs in milk were fed routinely to all patients twice daily between high caloric meals because of the required concentration of amino acids necessary for the reconstruction of the wounded tissues; growth factors must also be supplied to the parasitic bacteria by the patient through the infected bone and other tissues. This may include not only the amino acids, but purines, pyrimidines, oleic acid, vitamins, and hemin.[9]

Loss of tissue and hemorrhage at the time of the wound, together with the nutritive requirements of the pathogenic bacteria and of wound healing, did much to explain the emaciation and anemia of these patients. Besides a high caloric, high protein diet, added vitamins and whole blood transfusions were also needed.

The underlying plan in all sequestrectomies, was not only to remove the necrotic bone, but all other pathologic tissue as well, so that the wound could develop a new blood supply unhampered by connective tissue and sclerotic bone. The new blood supply was to carry the chemotherapeutic agent in ample concentration to inhibit the growth of the pathogenic bacteria to such an extent that the immune mechanism of the host could destroy the microörganisms. This surgical procedure was considered fundamental to obtaining the results in this study.

Penicillin and the sulfonamides were not mixed and used locally in the wounds, as recommended by some writers, because of evidence that the two agents seem to act on bacteria in an opposite manner. Sulfonamides probably deprive sensitive bacteria of oxygen, while penicillin surrounds them with too much oxygen. Unpublished observations made prior to this study, failed to reveal any therapeutic benefit or harm from using this mixture in wounds.

CONCLUSION

Penicillin in adequate doses (forty to fifty thousand units every three hours) is the most valuable therapeutic agent yet introduced in the treatment of chronic osteomyelitis of traumatic origin. Wounds in ninety-four cases out of one hundred treated by this method, ceased draining and healed after an average of sixty-six days. Twenty patients of this series were operated upon for the correction of their deformities within six weeks after drainage had ceased from the osteomyelitis. Some of the surgical procedures were major operations and had to be repeated in stages before the deformities were corrected.

No recurrence of the bone infections was observed after an average of seventy-five days. Previous writers have recommended from six months to two years between the cessation of all signs of bone infection and surgical correction of deformities. By making such corrections within six weeks, not only is much time saved, but the morale of the patient is improved, as well as that of other patients awaiting surgical reconstruction.

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RÉSUMÉ

Dans la guerre récente, il eut de nombreux blessés et peu de décès en comparaison avec les guerres précédentes. Les médecins civils et les hôpitaux auront un grande nombre de cas d'infections osseuses à soigner. D'après l'expérience de l'autéur, la pénicilline en doses adéquates (de 40,000 à 50,000 unités chaques 3 heures) est un agent de haute valeur pour le traitement d'infections osseuses d'origine traumatique. Les récidives sont moins fréquentes et la guérison des plaies et des corrections de déformités s'effectuent en moins de temps. De cela, le moral du malade est relevé.

RESUMEN

Se señala aquí el hecho de que la gran cantidad de heridos resultantes de la

reciente guerra conjuntamenta con la baja cifra total de mortalidad habrá de plantear muy pronto un problema a los médicos y hospitales civiles en vista del gran aumento en la proporción de casos de infecciones óseas crónicas que se veran obligados a atender. El autor cita su propia experiencia como oficial médico de la Marina para apoyar su tesis de que la penicilina a dosis adecuadas (40 a 50 mil Unidades cada tres horas) constituye el remedio terapéutico más valioso que se ha introducido en el tratamiento de las infecciones óseas crónicas de origen traumático. Este investigador estima que las posibilidades de recidivas se hallan notablemente disminuidas, asi como cree que se puede acortar en meses el tiempo entre la cicatrización de las heridas y la corrección de las deformidades con la consiguiente mejoría profunda de la moral de los pacientes.

Свод

Автор обращает внимание на то, что высокая процентность ранений в недавней войне, вместе со сравнительно низкой смертностью, создаст в штатской практике задачу лечения хронических костных инфекций. Автор приводит свой опыт во флоте, как доказательство, что адэкватные дозы пенициллина (40-50 тысяч одиниц каждые три часа) являются сяч единиц каждые три часа) являются сих пор в терапию хронических костных инфекций травматического происхождения. Он верит, что рецедивность этим очень понижена, а также, что срок между залечением раны и исправлением деформаций может быть укорочен на много месяцев, что очень улучшает мораль больного.

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The editors of the "JOURNAL" therefore welcome the opportunity to consider for publication all material which may be of interest to those engaged in any branch of the wide field of surgery, *whether members of the International College of Surgeons or otherwise.*

An Appreciation

The International Board of Trustees of the International College of Surgeons wishes publicly to express their appreciation, congratulations and gratitude to the Government of the Republic of Peru, to the officials of that Government, to Professor Doctor Francisco Graña and to his able committees and co-workers, for the successful and brilliant scientific Assembly held in the beautiful city of Lima, Peru, on March 24 to 27, 1946, inclusive.

On page 630 of this issue will be found detailed accounts of the Opening and Closing Sessions of the Assembly; also the Proceedings of the House of Delegates of the International College of Surgeons. Embodied therein will be found some of the inspiring addresses which were made at these functions; also those presented at the Banquet which was tendered the foreign delegates attending this great Assembly, by the Peruvian Surgical Society and other scientific organizations.

*It was originally intended to issue a Special Volume of the Assembly Proceedings. Later, however, it was found that, under the present unfavorable conditions of paper supply and labor difficulties, too great an amount of time would of necessity be consumed before such a volume could be published. Consequently, it was thought best, after looking at the situation from every angle, to include the papers presented at the Lima Assembly, as rapidly as might be, in forthcoming issues of the "*JOURNAL,*" in order to expedite distribution of these excellent scientific contributions to all of our readers throughout the world.*

Management of Cholecystitis

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SURGERY of the gallbladder is not a static subject. Its advances in recent years have been not so much in technic as in preoperative and postoperative management, diagnosis and indications for operation. We have recently completed a comparison of 65 operations on the gallbladder performed in 1924 with 132 performed in 1944. We have excluded common duct operations for reformed or incompletely removed stones, as well as operations for cancer of the gallbladder as well as operations on the biliary tract to bypass carcinoma of the pancreas.

While there has not been any great change in the technic of operative procedures on the gallbladder, we would like to discuss a few of the principles and modifications of procedures which we use.

While we have earlier advocated the use of the transverse or oblique incision (J. Internat. Coll. Surg. Jul.–Aug. 1940) we now use it in a minority of our cases. We find a high right rectus incision, splitting the rectus muscle in the direction of its fibers, more suitable for most cases. For more exposure in the upper portion of the wound, a hockey stick extension medially may be made. The transverse or oblique incision is used principally in elderly patients who are to be gotten up immediately after operation and in patients with one or more vertical scars from previous laporotomies.

Adequate exposure is one of the prerequisites of good gallbladder surgery; a generous incision is the first step in obtaining good exposure. Moist gauze pads are then used to wall the intestines away from the operative site. Here we find the Walker retractor an aid in retracting the duodenum and exposing the common duct.

We make it a practice never to remove the gallbladder until a thorough examination has been made of the common duct, duodenum and pancreas. This is especially important in jaundiced cases. In carcinoma of the pancreas, cholecystectomy is contraindicated, as the gallbladder may be used as a route through which to bypass the obstructing growth. In definite carcinoma of the pancreas or ampulla of Vater, a gastro-enterostomy is done at the initial operation. If there is any doubt, a cholecystostomy is performed. At a later date, a cholecystoenterostomy may be done which may add months of comfortable existence to the patient's life.

Surgery of the common duct is indicated when there is present dilitation or thickening of the duct, palpable stones in the duct, or an obstructive type of jaundice not explained by extrinsic pressure on the duct. In the latter type of case, we find a duct of normal size and thickness below an obstruction, such as a large stone in the lower portion of the cystic duct which is pressing down on the common duct. A second reason for not removing the gallbladder before doing common duct surgery is that the gallbladder may be used as a handle or

retractor to hold back the liver and to put the cystic and common ducts on the stretch, thus facilitating their dissection.

One word of caution must be interposed here. With the cystic duct puiled

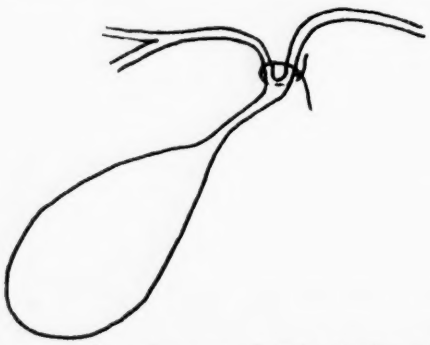

Fig. 1. Tenting of common duct by traction with ligature about duct.

outward and under tension, it is possible to "tent up" the common duct; one must be very careful not to pass a ligature around the tented common duct. (Fig. 1.) If the gallbladder is acutely inflamed and markedly distended, one might be afraid of rupturing it inadvertently by using it as a handle. In that case, the surrounding viscera should be well walled off with moist gauze packs to prevent any soiling; the gallbladder is then aspirated with a large-bore needle connected to the suction apparatus. If the gallbladder is not too tense, it may be caught as in fig. 2. In many cases it is helpful to open the gallbladder, after aspiration, remove its contents and split it down to the cystic duct. (Fig. 3.) The cystic duct may then be probed for stones. Its dissection may be facilitated by a probe in the cystic duct which then may easily be followed down to the common duct. As previously pointed out, it is wise in some cases to peel out the infected or gangrenous mucous membrane and insert a drainage tube into the cystic duct. (Figs. 4 and 5.)

In general we prefer to remove the gallbladder in cases where this type of procedure does not add to the operative risk. However, we make an axiom of the fact that we fit the operation to the patient, not the patient to the operation. We have long based our decision as to the type of operation to be performed on three things; (1) the age and general condition of the patient; (2) the severity of the disease; and (3) the condition of the biliary tract. While we do many less cholecystostomies than we used to do (37 per cent of the biliary tract operations in 1924 and only 7 per cent in 1944), the wise surgeon still makes use

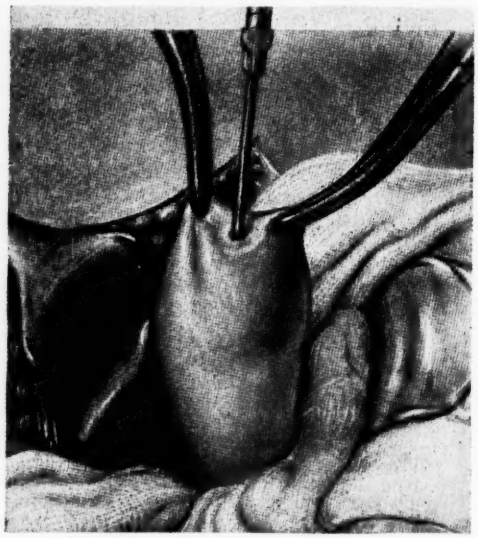

Fig. 2. Method of aspirating gallbladder after walling off with pads.

of this procedure in the aged and in "poor risk" patients. Of the nine cholecystostomies performed in 1944, three, or one third of the cases, also included a choledochostomy. All of these were in elderly patients where the added risk of cholecystectomy was deemed inadvisable.

We also have no set routine in chole-

cystectomies as to ligation of the cystic duct and vessels. We sometimes ligate them together and sometimes dissect them out and ligate them separately. In all cases we doubly ligate both the duct and the vessels. Rarely is a common duct opened and a drainage tube not inserted. The senior author does not recall a single case in which he opened the common duct and did not insert a drainage tube. We do not feel that there is any danger in this procedure; rather there may be grave

Fig. 3. Method of opening gallbladder.

danger in *not* draining the common duct. We usually select a "T" tube of approximately one half the size of the common duct. We made the cross bar portion of our "T" tubes relatively short having the wings extend only a few centimeters to either side of the straight tube. We also like to cut a V out of the tube just opposite the entrance of the long arm of the T-tube. This serves two purposes; (1) it facilitates the withdrawal of the tube by allowing the two short arms to fold together; (2) it allows inspection of the stoma of the long arm into the cross-bar of the tube. We have frequently found this opening to be occluded by fringes of rubber at the junction of the two arms. (Fig. 6.) These tubes are allowed to remain for from two to four weeks, though we have left them in as long as a year.

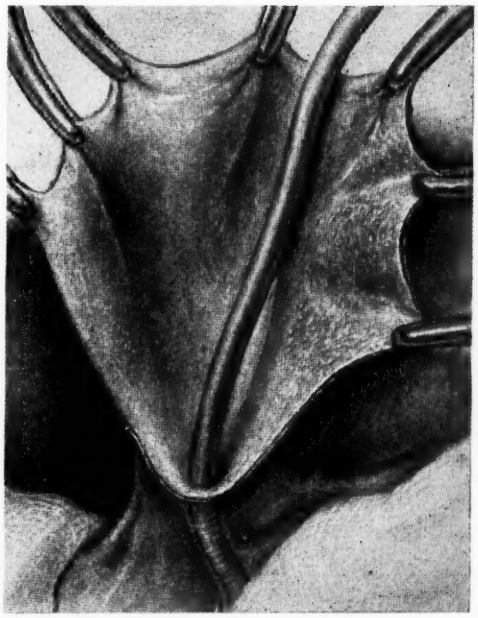

Fig. 4. Drainage of cystic duct.

On about the fourth postoperative day, the T-tube is irrigated with warm saline solution using no positive pressure other than gravity. Blood clots, small stones and muddy debris may be washed out in this manner. If there is no return flow from a copious irrigation it is assumed that the solution has passed into the duodenum. In all cases where there is any doubt about the patency of the common duct and the

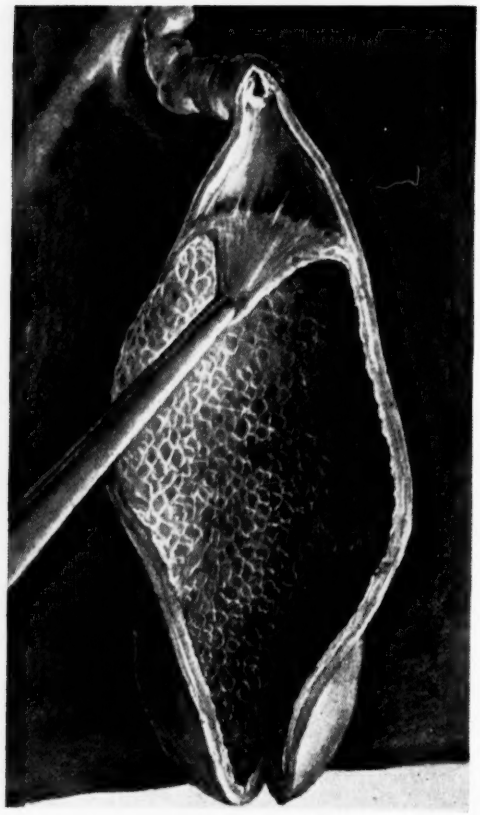

Fig. 5. Removal of mucosa.

ampulla of Vater, a cholangiogram is made by the injection of radiopaque substance through the T-tube. If there is evidence of obstruction or if the duct is dilated, the T-tube is allowed to remain.

At the termination of all gallbladder operations, a soft rubber drain is placed in Morison's pouch. This is brought out through a stab wound or through the main incision. Patients who do not have drains in their wounds after gallbladder surgery, appear to have more postoperative pain. There is also much greater danger of bile peritonitis, we have seen several cases that had to be reoperated to provide drainage. In a high percentage of our own cases, we find a considerable amount of bile on the dressings even though we twice carefully ligate the cystic duct. Occasionally, this may be explained by the presence of an accessory duct which was not noticed and ligated at the time of operation.

We frequently find it helpful to give antispasmodics such as atropine or nitroglycerine to the patient before irrigation of the T-tube or cholangiograms. We have tried without success, Best's regime of antispasmodics and chologogues for persistent obstruction except in a few cases. Ether in the common duct is dangerous because of the possibility that if there is an obstruction at the ampulla of Vater, the ether may get into the pancreatic ducts and precipitate an acute pancreatitis. When ether is used, no force is applied except

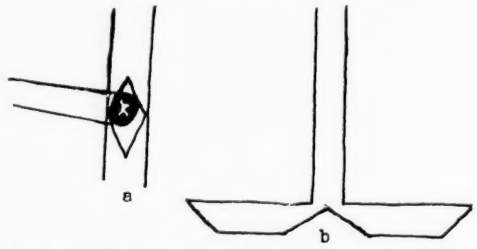

Fig. 6. Method of shaping "T" tube. *a.* Shows fringe of rubber about opening of long arm of "T" tube.

gravity. It has recently been reported (1) that Solution G (Best & Taylor) is of great help in dissolving stones in the common duct through a T-tube.

For the past seventeen years we have been using spinal anesthesia. We find it especially suitable for gallbladder surgery. It gives better relaxation, allowing more exposure of the biliary tract with less retraction trauma than may be obtained with general anesthesia. We did not use spinal at all in 1924. At that time, ethelene was slightly

favored over ether anesthesia. We no longer use ethelene. Last year we used ether in 14 per cent of our gallbladder operations and spinal in 81 per cent. In the bad risk cases, local anesthesia by field block and local infiltration, supplemented by gas or pentathol sodium is the anesthesia of choice.

The preoperative preparation of the patient suffering from chronic cholecystitis without jaundice is the same as that for most other major surgery. Especial attention, however, is given to the glucose reserve. (We have previously pointed out that immediate operation is not adisable in cases of acute gallbladder disease.) Morphine is given for sedation. Massive hot stupes relieve the abdominal discomfort and the muscle spasm. Dehydration is corrected and fluid balance maintained by parenteral methods with glucose and saline as indicated. If the patient has been vomiting, sodium lactate or Hartman's solution may be used. For vomiting or distention, the Levine tube with continuous suction is used. Oxygen therapy is also of value in distention. We now give vitamins B, C and K routinely to all gallbladder patients both pre- and postoperatively. Vitamins B and C are given for their affect on healing and cell metabolism, and vitamin K for its affect on prothrombin formation which, of course, is of the most importance in the jaundiced patient. Blood transfusions are given for jaundice, anemia and low serum proteins, and are imperative in shock cases. We prefer small daily blood transfusions of from 200 to 250 c.c. rather than larger amounts in patients with liver damage.

For several years we have used sulfathiazole both pre- and postoperatively in acute gallbladder disease because it appears to reduce the virulence of the infection. In addition we are now using penicillin.

The postoperative treatment is a continuation of the procedures used in preoperative care. It is this pre- and postoperative care which we believe is the most important factor in reducing the mortality rate from 6.2 per cent for all cases in 1924, to 3.1 per cent (or a 50 per cent reduction) in 1944.

There has also been a marked change in the time during the course of the disease at which operation is undertaken. The average age of the patient operated upon in 1924 was 44; in 1944 it was 50. In 1924 many operations were performed for chronic cholecystitis without stones. These patients had the same symptoms and in about the same percentage as did the cases operated upon in 1944. Pain was apparently a greater factor in 1924, since it occurred in 98 per cent of the cases, whereas it was present in only 86 per cent in 1944.

It must be remembered that it was in 1924 that Graham introduced his dye method of cholecystography. Prior to that time there was no accurate method of determining the presence of radiotransparent stones. With the more recent refinements in the dye used in gallbladder studies, our diagnostic acumen has increased. Now cases of cholecystitis without stones are usually treated medically, if their symptoms are not too discomforting or if they have no acute attacks complicated with empyema, gangrene of the gallbladder or the danger of perforation.

Ninety one per cent of the cases operated upon in 1944 had stones whereas only 54 per cent had stones in 1924.

Graham tests were first made in our office in November 1925. Since then we have made a total of 4800 tests. In addition we have made hundreds of tests at the hospital. All cases of chronic cholecystitis are given preoperative

Graham tests. Whenever possible we also like to have upper gastrointestinal studies and barium enemas. Graham tests are of course not done during acute attacks or in the presence of jaundice. We do want to call attention, in the latter type of case, to the value of a scout film of the abdomen and chest. This frequently reveals the presence of gallstones and a distended gallbladder together with the presence or absence of pneumonia.

Gallbladder disease may, in some instances, mimic cardiac disease. Palpitation and tachycardia may result from reflex parasympathetic stimulation associated with an acutely distended gallbladder. On the other hand, cardiac patients may also have gallbladder disease. If there is any question of myocardial or coronary disease in any of our patients, we obtain an electrocardiogram.

Neither previous attacks of supposed coronary disease, hypertension, or obesity should prevent surgery if it is needed in infected gallbladder cases with stones. Many so-called "invalided" patients with definite cardiac pathology and gallstones will be benefited by proper gallbladder surgery.

COMPARISON OF CASES OF GALLBLADDER DISEASE OPERATED UPON IN 1924 AND 1944

	1944	*1924*
Number of cases	132	65
Men	27	14
Women	105	51
Average age	51	44
Oldest	84	78
Youngest	22	21
Average number of days in the hospital	18	18
Previous gallbladder surgery	5	2
Symptoms		
Pain	114 (86%)	64 (98%)
Colic	37	11
Nausea	74	32
Vomiting	60	27
Chills and fever	26	6
Jaundice	23	7
Weakness	7	13
Pathology	*1944*	*1924*
Number of cases		
With stones	120	35
Chronic	99	30
Acute	21	5
Without stones		
Chronic	9	29
Acute	3	1
With hepatitis	25	20
With pancreatitis	8	17
Operations		
Cholecystostomy	6	24
Cholecystostomy and choledocostomy	3	0
Cholecystectomy	94	26
Cholecystectomy and choledochostomy	19	1
Cholecystectomy and drainage of the cystic duct	9	14
Gallbladder surgery and appendectomy	16	24
Anesthesia		
Spinal	72	0
Spinal and gas	24	0
Spinal and ether	9	0
Spinal and pentathol	2	0
Ether	19	23
Ethelene	0	28
Ethelene and ether	0	9
Local and gas	4	3
Local and pentathol	2	0
Complications		
Deaths	4 (3.1%)	4 (6.2%)
Ruptured gallbladder	4	0
Cardiac	14	2
Pneumonia	3	2
Atelectasis	6	0
Wound infection	4	2
Bile peritonitis	3	0
Wound disruption	1	0
Diabetes	1	0
Hyperinsulinism	1	0
Typhoid fever	1	0
Other operations performed at same hospitalization		
Number of cases (total)	14	5
Pelvic	6	2
Thyroid	4	1
Removal of foreign body	2	0
Meckel's diverticulectomy	1	0
Cystoscopy	1	1
Hemorrhoidectomy	0	1

SUMMARY

A comparison is made between gallbladder surgery, as done 20 years ago (1924) and today. Some of the principles of the surgical technic are reviewed. The importance of pre- and postoperative care of these patients, in the use of water, electrolytes, glucose, blood, oxygen, vitamins B, C and K,

morphine, hot stupes, suction, sulfathiazol and penicillin, is stressed. To the judicious use of these aids, the authors credit most of the 50 per cent reduction in operative mortality which has occurred in the twenty years of the study.

It is pointed out that immediate operation is not advisable in cases of acute gallbladder disease. Instead, operation should only be undertaken after proper preoperative study and preparation. It is further stated that surgery is not advisable upon the poorly-functioning gallbladder without stones, if the patient is not greatly distressed thereby.

RÉSUMÉ

L'auteur compare la chirurgie des voies biliares d'il y a vingt ans et celle de nos jours. Il passe en rêvue les principes de la technique chirurgicale. Il attache une grand importance aux soins pré-opératoires et post-opératoires des malades. Il recommande fortement et discute à fond l'emploi de l'eau, des électrolytes, de la glucose, du sang, de l'oxygène, des vitamines B, C et G, de la morphine, des applications de compresses chaudes, de la suction, du sulfathiazole et de la penicillin. A l'emploie de ces différents procédés, l'auteur attribue en grande partie l'abaissement de la mortalité opératoire (50%) de nos jours.

Dans des cas aigus, l'opération immediate n'est pas recommendable pour les maladies aigues de la vésicule biliaire. On ne doit opérer qu'après étude et préparation pré-opératoires du malade. Si le malade n'est pas très souffrant n'opérer pas en l'absence de calculs biliaires ou d'outre état patholagique grave.

RESUMEN

Se hace una comparación entre la cirujía de la vesícula biliar como se hacía hace veinte años (1924) y como se practica hoy. Se analizan alguno de los principios de la técnica operatoria. Se subraya la importancia del cuidado del paciente en los períodos pre y post operatorio, el uso del agua, la electrolisis, glucosa, sangre, oxígeno, vitaminas B, C y K, morfina, bolsas calientes, drenaje, sulfatiazol, y penicilina. El autor acredita al cuidadoso uso de estos auxiliares más de un 50% de la reducción en las muertes por operación durante los veinte años que abarca el estudio. Subraya que no es aconsejable una operación inmediata en los casos de enfermedad aguda de la vesícula biliar.

Por el contrario la operación sólo debe efectuarse después de una adecuada preparación y de un estudio pre operatorio. Indica además que no es aconsejable la cirujía en una vesícula de funcionamiento defectuoso, caso de no existir piedras, si el paciente no sufre considerablemente por ello.

Свод

Сделано сравнение хирургии желчного пузыря теперь и 20 лет тому назад. Обозрены некоторые принципы оперативной техники. Подчеркнута важность до- и после-оперативного применения в этих больных воды, электролитов, глюкозы, крови, кислорода, витаминов В, С и К, морфия, горячих припарок, высасывания, сульфатиозола и пенициллина. Здравомысляющему применению этих воспомогательных мер автор приписывает 50-процентное уменьшение оперативной смертельности в течении его 20-ти летнего опыта.

В случаях острого желчно-пузырного заболевания немедленная операция не советуется. Вместо этого операция должна быть предпринята только после тщательного преоперативного изучения и подготовки. Также указано, что хирургическое вмешательство не советуется при плохо функционирующих желчных пузырях без камней, если только больной не очень страдает.

Surgical Treatment of Varicose Veins

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HISTORY

THE history of scientific achievements is very fascinating to me as it shows how it takes hundreds or even thousands of years to understand the simple principles of certain phenomena. After a discovery is made, in retrospect it seems almost unbelievable that it should have taken so long for a simple truth to be understood or a simple technic developed. Even after the principles have long been established, it becomes necessary to repeat them over and over in order to preserve them. This is strikingly true of the history of the surgical treatment of varicose veins.

As I have pointed out in an earlier paper, Hippocrates,[1] 400 B.C., became the founder of the injection method when he produced thrombosis in varicose veins by puncture, while Celsus, 500 years later, became the father of surgical treatment of varicose veins when he made incisions over varices at 4-inch (11 cm.) intervals, touched them with a hot cautery and pulled out the coagulum (fig. 1).

For nearly 1800 years after Celsus,[8] surgeons continued various modifications of his technic of destroying varicose veins, but never above the knee, since obviously varices are more marked in the lower leg and complications with ulcers develop there. They did very little, if anything, in the thigh because of the lack of clear understanding of the mechanics and physiology of the circulation in the veins. Had they understood the pathological physiology, they would not have practically bled their varicose patients to death. They used to drain at least one-half pint of blood out of a vein when ligating it, as advocated as late as 1768 by Heister.[3]

With the advent of asepsis in the nineteenth century, surgeons became more daring. Not only did they begin doing more radical excisions and ligations, but also ventured higher and higher in the leg. It was Madelung[5] who, in 1884, described a radical removal of the saphenous in the lower third of the thigh and its extension into the calf. Trendelenburg[11] in 1891 suggested ligation still higher, in the middle third of the thigh (fig. 2). It took another 25 years before Homans[4] began advocating high stripping at the fossa ovalis to include all branches of the great saphenous (figs. 3 and 4).

MODERN TRENDS

Today ligation of the great saphenous is even more thorough and our knowledge of its branches at the fossa ovalis more accurate (fig. 5), and yet our surgery is much simpler and the results more lasting. Retrograde injection has become a part of high ligation. We have done away with the tedious extripation and stripping methods with their accompanying mortality and morbidity.

A study of the literature[1] between the years 1926 and 1937 reveals that stripping, extirpation and Trendelenburg operations gave 30 per cent recurrences, 7 per cent embolism and 2 per cent deaths, besides being cumbersome,

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requiring prolonged hospitalization and producing scars.

Today, high ligation with retrograde injection has no mortality, and morbidity is practically *nil* in competent hands. It is neater and simpler after

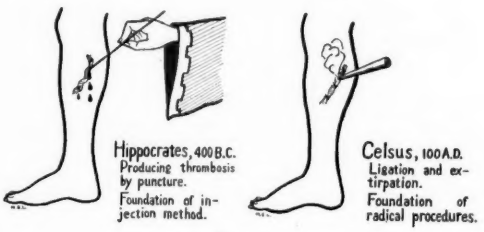


Fig. 1

mastery of anatomy and understanding of the underlying principles. The patient is hospitalized, if at all, only for a day or two; he is back at his normal routine within a few days without very much loss of working time.

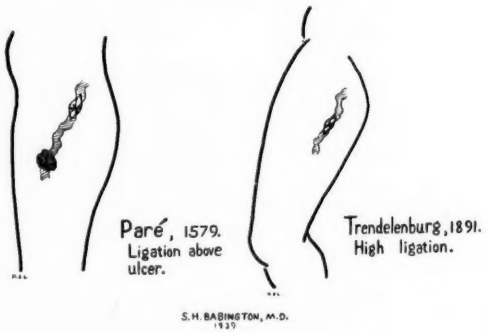


Fig. 2

Despite the best results obtained today, we are still having some "recurrences". Therefore, men like Sherman [10] and some others are again giving attention to the more radical methods by exploring further the anatomical peculiarities of the saphenous system. Thus, the emphasis is being placed primarily on the mechanics of the venous circulation when actually there are some endocrine and physio-biological forces of greater importance at work which we do not yet completely understand.

My contention is that men and women who develop varices have a congenital diathesis or acquired predisposition because of endocrine and biological disturbances, and that mechanical insults such as prolonged standing in certain occupations, intra-abdominal pressures (such as pregnancy, coughing, girdles), or external pressures (such as garters) play very little part, if any, in the production of varicose veins. I have spent many summers on the Navajo reseration in Arizona and I have never heard of a Navajo having varices. It has been

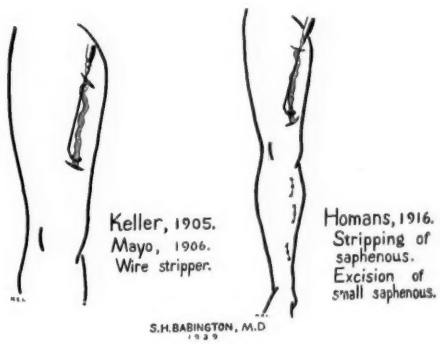


Fig. 3

reported [9] that in 4826 admissions to the Sage Memorial Hospital at Ganado, Arizona, there were no varicose veins noted. In a personal communication, Dr. Salsbury tells me that in 21,000 admissions he has seen only two or three Navajos with varicose veins and yet I know 10 per cent of our white population has varicosities. I would be very much interested to know what is the situation in this respect among the more primitive Indians of the South American countries who have no white blood mixtures.

When the time comes that we know the basic causes of varicosities, perhaps then we shall be able to prevent their

development and there will not be the need of surgery except on the anatomically abnormal. Until then we cannot go on extirpating every vein in the leg. A superficial vein that looks normal today may be varicosed five years hence;

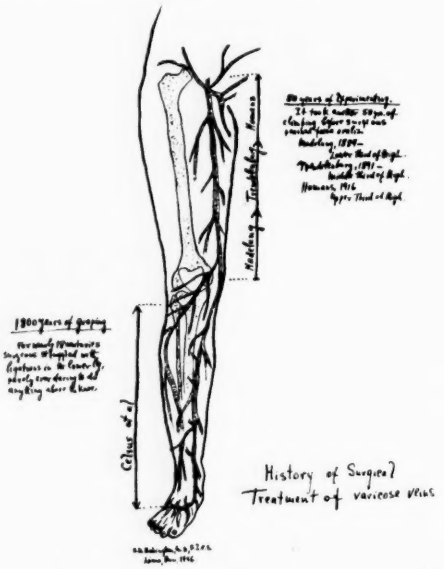


Fig. 4

this should not be called a "recurrence" as is being erroneously done by most writers. Our aim should be to treat these patients before the damage is great. Our aim should be to carry on an extensive campaign for early surgery before the veins have markedly dilated, before the valves in the great saphenous are destroyed, before valves in intercommunicating branches have become incompetent, before trophic changes in the skin have taken place leading to ulceration and the deep scarring which is so disabling and at times requires skin grafting or other surgical procedures.

INDICATIONS

The first question I am asked usually is, "On which patients do you operate and which ones do you inject?" The referred cases always are surgical cases because someone already has tried injections without any appreciable results; often they are very badly ulcerated. These patients have complete incompetency of valves, not only in the superficial saphenous system, but also at times in the communicating branches. All patients with incompetent valves should be operated upon; the sooner the better, as then the results will be more lasting. Even some patients with competent valves but with wide spread varices should be operated upon to prevent continuous dilatation and enlargement of the veins. Injection treatment would do the same in these cases, but that requires more time both from the patient and the surgeon, and, usually the patient will prefer the least time-consuming procedure. The patient with small varicosities should have the benefit of injection treatment but should be watched periodically.

GRADING OF VARICOSITIES

Since the details and extent of treatment vary with the degree of involvement and since such loose terms as "severe" or "mild" mean different things in the minds of different people, in 1939 I suggested that the varicosities of the leg be classified as Grades I, II and III, according to the well known tests devised for determining the incompetency of vein valves.[1]

The Schwartz test, as described by Chevrier, concerns only the competency of the valves of the great saphenous, while the Brodie-Trendelenburg, Perthes and Mahorner-Ochsner tests are for the purpose of determining the competency of the valves of the perforating branches.

In the Schwartz test fingers placed on the vein at the fossa ovalis feel the impulse of the column of blood when the

varicosities below are tapped with the fingers of the other hand.

In the positive Brodie-Trendelenburg test the superficial vein fills up suddenly from above when the pressure applied to the vein at the groin in recumbent position is removed upon standing, indicating incompetent saphenous valves. If the veins do not fill very rapidly from above Trendelenburg is said to be negative, indicating competency of the valves. But if the varicosities fill up in less than 30 seconds, also from below, but before the removal of the pressure at the groin, then it is a double Brodie-Trendelenburg positive. It is doubly positive, because not only are the valves in the great saphenous incompetent, but also the valves in the intercommunicating branches.

In Perthes' test the competency of the perforating valves, especially in the lower leg, is determined by applying a tourniquet in standing position with the veins distended. Upon exercising, in case of incompetency of these valves, the varicosities do not collapse, but if the valves are in good condition, the deeper system is able to pump blood out of the superficial system.

The Mahorner-Ochsner [6] test utilizes the same test at intervals of a few inches all along the leg to determine the location of the incompetent perforating branches.

To Grade I belong all single or early varicosities which are not yet associated with any incompetency of the great saphenous or communicating branches (fig. 6). The flow is retarded or stagnant in scattered areas. Schwartz, Brodie-Trendelenburg and Perthes are negative. These are cases that should have injection treatment. However, some of these at times have too many varices, in which case they will require a great many injections. In that event it might be preferable to do high ligation with retrograde injection.

To Grade II belong all the cases with incompetent valves in the great saphenous. There is a reflux flow. Schwartz and Brodie-Trendelenburg are positive. Perthes is negative. These cases should have high ligation with retrograde injection.

To Grade III belong all cases which have incompetency not only of the great saphenous but also of the perforating branches. Schwartz and Perthes are positive and Brodie-Trendelenburg is doubly positive. The Mahorner-Ochsner test at various levels will tell the exact location of these incompetent perforating branches. These cases should have high ligation with retrograde injection, plus ligations along the saphenous trunk where the perforating branches make their connections with deep circulation.

Grade II only at times will be accompanied by ulceration in the lower leg. Ulcers are common in Grade III. Ulcers will need a certain amount of medication and care both before and after high ligation with retrograde injection.

CONTRA-INDICATIONS

The next most common question is, "How do you tell whether the femoral circulation is in good condition, so that your patient will not be in difficulty later because of the lack of adequate deep circulation?" Most of these patients have at one time or another worn elastics. If this has given them comfort, this is enough test. You are safe in operating. If they have not worn elastics, you can bandage them and have them walk around the block and return to your office to get the same information.

Apparently pain following firm bandaging even in those with a definite history of phlegmasia alba dolens does not

occur very often unless the thrombophlebitis is of recent origin. Apparently, the patency of deep circulation is reestablished within a year. In the thousands of patients who have come to me specifically for varicose vein treatments, I do not remember even one who has complained of pain after such a test.

Age is not a contra-indication. Some of the most startling improvements, not only in the legs but also in the whole well-being of the patient have been seen in patients past 80. One man who had had recurrent ulcers over both legs for some 53 years and had walked with Unna boots 3 months out of every year, was able to get rid of his constant edema of the ankles and ulcerations within a few weeks with only one complaint, "Why didn't somebody operate on me before?"

The decompensated cases should be digitalized; diabetics should be brought under control before surgery. The heart cases usually have a better sense of well-being after high ligation since they are relieved of congestion in their legs.

ULCERATED CASES

Even acutely inflamed and ulcerated legs can be prepared for surgery within a very short time. Like everyone else, I used to waste a great deal of time in palliative measures waiting for the ulcers to heal up (or nearly so) before ligating. Now I treat them for several days with lead subacetate compresses, and, if the patient is in the hospital, also with quartz light. The leg is elevated but the patient is encouraged to be out of bed every two hours with the veins well supported with elastic bandages. Under this regimen these patients are ready for surgery within a few days to three weeks, depending on the size and severity of their ulcerations. Oozing stops, induration and dermatitis clear up and the swollen glands in the groin subside.

Most of these patients have a great deal of tenderness, redness and local dermatitis and at times a generalized rash because of the variety of drugs used on their legs. In their anxiety to get results, both doctors and patients tend to apply stronger drugs. When these fail they change from one kind to another in quick succession until the patient suffers from both the disease and medication. While preparing this paper, I saw a severe case of exfolliative dermatitis in a patient who had been treated vigorously by local applications of penicillin, also another who had been given a sulfathiazole ointment, the cure in this case being worse than the disease.

After all, the brownish trophic discoloration, swelling and ulceration are merely results of lack of proper circulation and not of an infection, though bacteria invade any devitalized tissue. By elevating the leg to get rid of stagnation and by applying lead acetate, which is an astringent anodyne and discutient, you check oozing and bacterial growth subsides. However, during this preparatory stage patients should not stay in bed continuously. They should be up and around at intervals of a few hours with elastic bandages applied to their lower legs. This keeps their spirits up and prevents them from becoming flabby and bedridden; also it forestalls thrombosis with its unfortunate sequelae of embolism. The night before surgery, the entire leg is shaven and prepared from the toes up to the umbilicus.

ANESTHESIA

To prevent thrombosis or thrombophlebitis, it is imperative that patients be ambulatory immediately after surgery; therefore I never use a general

anesthetic. Sedatives the night before and perhaps also the morning of surgery with a small dose of pantapon are all that is necessary, except for 1 per cent novocain locally. Since the total amount of novocain seldom exceeds 60 cc., in patients who are free of hypertension, it is permissible to use three drops of adrenalin to an ounce. This prevents the annoying oozing present in some cases.

The surgical area is infiltrated subcutaneously. After the incision has been made it may be well to inject some novocain also into the deep layers. When handling the great saphenous vein, the patient will experience some pain if the sheath is not also infiltrated. In doing this, one should be careful not to deposit the solution in the lumen. Some of the patients sleep all through surgery with the aid of pre-medication, but will awake and complain bitterly of pain if the saphenous sheath (which is full of nerves) is not also anesthetized. In a few very apprehensive or emotional patients who do not want to know what is going on, I have used sodium pentothal with great satisfaction.

SITE OF SURGERY

When we say high ligation, we mean as high as possible, not just anywhere along the great saphenous vein. It has to be exactly at the saphenofemoral junction and not an inch or even one-half inch below; this means the inclusion of all the branches of the great saphenous at this point. I have been obliged to operate on patients, who already had bilateral high ligation, not only because the ligation was not done flush at the saphenofemoral junction but also because one or more of the branches at the juncture were not tied off. This kind of surgery will never produce the desired results; this is one of the greatest causes of the failures which are bringing the technic into disrepute. If you do not want a tree which is in your garden, you don't just chop off one or two of its boughs or even saw it off in

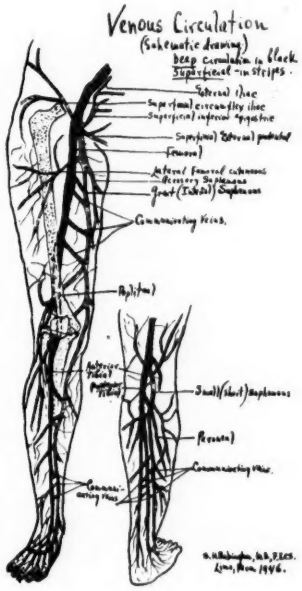


Fig. 5

the middle of its trunk. You go down as close to the ground as possible. The same is true with the trunk of the great saphenous (fig. 7).

Therefore, the most important thing to emphasize and re-emphasize is this truth: The ligation has to be at the extreme terminal end of the great saphenous at the femoral and it must include all the branches. These branches often are not arranged according to our textbook pictures (fig. 5). The variations in number and type of branching are so great that a number of papers have been written on this subject alone, the most recent one by four men in Chicago who have done 550 anatomical dissections.[2]

INCISION

A great deal has been written about the incision. It should be up and down or it should be across. It should be very small or it should be long. All of this is important only to the extent that it

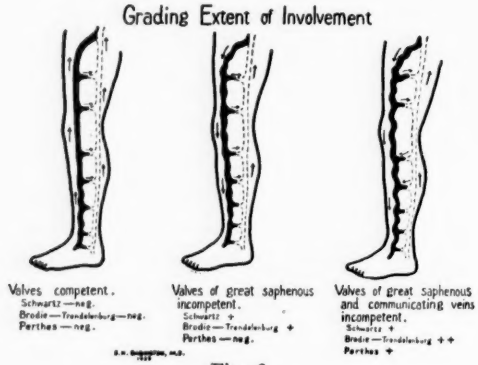


Fig. 6

gives you the proper exposure to do a thorough job.

Probably a transverse incision just below the inguinal fold should be considered the more desirable because of the ease of approximating the skin in closing. But after having used both transverse and longitudinal incisions over a period of many years, I have come to prefer the latter because it permits extension upward which is necessary in some cases where the saphenofemoral juncture is somewhat higher and its branches are easier to get at above (fig. 8). One third of my incision is above the inguinal crease and two-thirds below.

As to the length of the incision, it should be adequate. In obese persons it may have to be longer because of the depth, but whether a little longer or a little shorter the healing time is the same.

To make an incision, I palpate the femoral artery and make a scratch with the back of the scalpel about an inch mesial to it. This way there is no need of marking the saphenous beforehand by dyes or measuring the distances from the pubic bone which may vary in different people. In some patients the femoral trunk is more lateral or too mesial. Even in most of the obese you can feel pulsation in the femoral artery. In this way you avoid dealing with the variable measurements. However, in making your incision be sure that you are not pulling the flesh from one side to the other, especially in the obese or

Fig. 7

in those with a very loose skin because of recent loss of considerable weight.

You will meet a number of superficial bleeders which must be tied off first. I prefer having my patient's leg held straight since when it is abducted or the knee bent, the palpation of the artery becomes difficult because it drops deep in the triangle formed by the heads of the abductor longus and sartorius muscles. If any enlarged glands lie in

the path of the incision (this is a common occurrence in ulcerated cases), they should be excised instead of cutting into them. No need of stirring up infection or causing bleeding which is apt to occur if they are incised.

LIGATION AND RETROGRADE INJECTION

With proper exposure, the great saphenous will be found near the inguinal fold below the superficial fascia entering the fossa ovalis. The incision is continued into the coverings of the vein and the vessel is exposed for a few inches. Now it is lifted, clamped with two pairs of hemostats and sectioned.

One must be careful not to place the clamps too close together before cutting as they might slip or pull off from the ends of the stumps in manipulation. In some cases I use two pairs of clamps on the proximal stump or place a ligature on it in addition to the one clamp in order to make certain that there won't

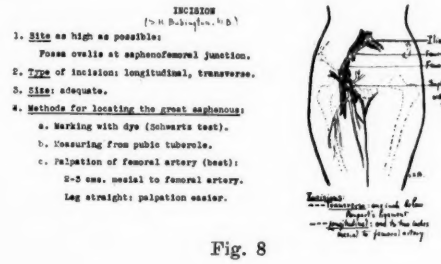
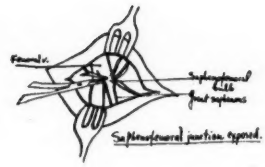

INCISION
1. Site as high as possible:
Fossa ovalis at saphenofemoral junction.
2. Type of incision: longitudinal, transverse.
3. Size: adequate.
4. Methods for locating the great saphenous:
a. Marking with dye (Schwartz test).
b. Measuring from pubic tubercle.
c. Palpation of femoral artery (best):
2-3 cms. mesial to femoral artery.
Leg straight: palpation easier.

Fig. 8

be any bleeding in case the clamp happens to be defective and slips off inadvertently.

With the aid of the clamp or clamps, using them like handles, the proximal stump is lifted and the dissection continued toward the terminal end of the vein. At times one meets a few small intercommunicating veins between the great saphenous and the femoral, especially in old chronic cases. These also have to be ligated separately. Finally



Figs. 9, 10 and 11

the femoral vein is reached and all tributaries at the saphenous bulb are tied off. These tributaries usually are: mesially external pudental, cephalad superficial epigastric and thoraco-epigastric, laterally superficial circumflex iliac and laterally, but going downwards external superficial femoral. It is imperative that these tributaries or any others present be tied off carefully (figs. 5, 9, 10).

The great saphenous stump is ligated next as close to the femoral vein as possible, using No. 0 chromic catgut. If the ligature is not flush with the femoral vein a thrombus may form in the stump. A second but transfixing ligature is placed distal to the first and the excess stump amputated. In putting the needle through the vein for transfixing purposes, one should not pull on the stump too hard as this will put a strain on the femoral and iliac veins and damage them. The stump can be steadied with

the aid of a pair of hemostats and the needle should be the cutting type.

McPheeters[7] places a pursestring suture to reinforce the foramen while he tucks in the proximal stump without amputating the excess portion of it. I have never done this and I do not see any reason for it, nor have I seen any ill results because of not doing it. My stump being very short, it is very easily covered up by one or two interrupted sutures which pick up the edge of the foramen and superficial fascia together.

The distal end is next lifted with the aid of the clamp which was placed on it before transecting the vein. A chromic catgut ligature No. 0 is now placed around the vein somewhat below the clamp but not tied, and a sclerosing solution injected into the vein with a short 25 gauge needle. As the needle is being withdrawn, my assistant ties off the ligature. A second but transfixing ligature is placed distal to the first and the excess stump amputated (fig. 11). If the varicosities in the thigh are unusually large, it may be well to place the patient in a slightly Trendelenburg position to empty the veins before injecting the solution. The table is levelled as soon as the solution is in.

The essential part of the operation being completed, the wound is washed out with normal saline to detect minor bleeders if any, as otherwise there might be some oozing which would delay the healing by causing hemotoma.

There has been a great deal of talk about injecting or tying off the femoral vein by mistake, about developing thrombosis in the femoral vein from the sclerosing solution which supposedly gets into it through the perforating branches, and about hemorrhage from the saphenous stump. I have never had such cases. In analysing reported cases, I have come to the conclusion that these accidents are primarily caused by:

1. Lack of understanding of the anatomical arrangement and variations in structures. The great saphenous enters the femoral usually at an acute angle. At times the femoral lies very close to it and at times the femoral artery may be anterior to the femoral vein. Where one is not sure of his structures it would be well to dissect up to the foramen and see where the saphenous enters the femoral vein before clamping it.

2. Too much haste in placing clamps on structures before they are identified properly.

3. Failing to handle the structures with gentleness.

4. Failing to doubly ligate the stumps. In addition to the double ligation one of my ligatures on each stump is the transfixing type (the needle going through the lumen), tied on both sides of the vein and then sutured to the superficial structures near by.

5. Surgery outside of a hospital where proper facilities are lacking. This kind of surgery should always be done in a hospital. All the patients who have come to me with a history of an office or clinic ligation had a ligation a few inches below the saphenofemoral juncture. I believe this is unforgivable in the light of our present knowledge and perfected technic.

SCLEROSING SOLUTION

The questions usually raised are: "What do you inject?" "How much?" "Doesn't it get into the arterial system?" The last question is easiest to answer. No, it can't, since the flow in the veins is towards the heart. Besides, if it were possible to force down the solution, it has to go through a vast plexus of venous and arterial capillaries where it would become greatly diluted

before reaching any arteries. My injection is not made under pressure and the amount of solution is so small that it never could distend the veins injected. I use monolate and only 3 to 5 cc. altogether. The solution gets better distributed as soon as the patient is off the operating table. In over 300 consecutive cases of retrograde injection and in many thousands of office injections, I have never had a single case of severe local or generalized reaction from monolate or any evidence that any of the solution entered the femoral vein by way of the communicating branches. Severe reactions in reported cases were due, perhaps, to overly large amounts of sclerosing solution.

LIGATION OF PERFORATING BRANCHES

In Grade III varicosities, better results will be obtained if the great saphenous is ligated along its course both in the thigh and lower leg wherever it is joined by an incompetent perforating branch. Sutures are placed in pairs, one just above and one just below the perforating vein which is located by comparative tourniquet test and marked prior to surgery. The ligation is done very simply and easily through the skin with chromic catgut using a cutting needle. The tight ligature applied through the skin will, within two weeks, cut through the vein and do the same thing as an open ligation. I also believe that we should place similar ligatures on the greatly enlarged and tortuous branches of the great saphenous in the lower leg even in the absence of incompetent perforating branches, since these superficial veins are often unsightly, forming large plexes of lakes, and are at times the only cause for bringing the patient to surgery. Both for cosmetic reasons and for more lasting results these veins should have their continuity interrupted. If this is done very seldom will it be necessary to do any injections in the lower leg after surgery.

LIGATION OF THE SMALL SAPHENOUS

Then there are some who, by some magic, expect the high ligation and the sclerosing solution to take care of all varices in the lower leg, forgetting that the small saphenous is not a branch of the great saphenous. The small saphenous is a branch of the popliteal vein and drains primarily the posterior and lateral aspects of the calf (fig. 5). Being shorter than the great saphenous and having a little better fascial support it is not apt to become varicosed so easily. If need be, its terminal end can be exposed at the popliteal fossa just below the knee joint, ligated and injected in the same fashion as is done for the great saphenous at the fossa ovalis. The ligation of its branches below the popliteal fossa can be done very easily through the skin as in the case of the great saphenous. In two weeks these catgut sutures drop off. If, occasionally, one or two of these persist in staying in, they can be removed as any other skin stitches. These ligations through the skin usually require no treatment or care, except for a protective dressing held in place for two weeks with adhesive tape.

DRESSING AND POSTOPERATIVE CARE

This is one type of surgery where I believe the dressing should be done by the surgeon himself. The bandaging should be firm but not tight. The firmness will obliterate a possible space and prevent oozing—capillary or lymphatic—consequently giving a quicker healing wound without infection. This is especially true in the obese. A few sponges are rolled together and placed over the length of the wound, these, in turn, being

covered with flat sponges. Now two or three-inch wide adhesive strips are firmly placed over the dressing. These fan out from the inner side of the thigh well above the lower quadrant of the abdomen and outer thigh. They should fit well in the crotch but not cut into the flesh when the patient walks. It is seldom that I ever do any other dressing of the wound until it is time to remove the stitches one week later. If there are large varices over the inner thigh, which often look like a bunch of grapes, I apply strips of adhesive tape over them, but these do not encircle the entire leg to impede the circulation. These also stay on for one week or longer.

As to the care of the lower leg, elastic stockings or ace bandages are placed over it and the patient permitted to get up and walk about immediately. This prevents thrombus formation and I am very happy to report that I have never had a patient who developed thrombosis, phlebitis or embolism. Of course, if there are any ulcers present they are covered with plain gauze held in place with adhesive before applying the elastics. If the patient has been properly prepared prior to surgery, the ulcers are usually dry and do not require very much attention. All ointments are superfluous. This dressing and elastics also are left in place for one week and inspected at the time of the removal of the sutures from the inguinal wound. Usually by the end of the second week all dressings both from the thigh and lower leg are discarded (unless the ulcers require some protective coverings), except for the elastics which are worn for at least two months. They may be removed for the night, but must be re-applied before getting out of bed. At the end of two or three months they are left off an hour or so a day for the first week, for two hours a day the following week, and so on until their use is discontinued. During this period if there are any varices in the lower leg they are injected.

These patients should return for checkups at intervals of several months so that if any small varicosities make their appearance they may be treated before they enlarge. After all, these patients have a diathesis for forming new varicosities—an inherent condition—and no operator should ever promise that no varices will ever develop regardless of how thorough his work is. Even those patients who have gone through the most radical surgery with extirpation of the great saphenous and all of its large branches have come to me for ligation which means that some of the smaller branches have become gradually distended. In a few of these cases that I have operated upon I have found one of the main troubles to be the failure to get all the branches at the saphenofemoral juncture. Sometimes the pudental or superficial epigastric and sometimes the circumflex iliac were left untied. In other words, the ligation was not done high enough and a collateral circulation was established through these blood vessels, causing smaller superficial veins to distend because of the inherent weakness of the intima.

Seldom is there need for additional injections in the lower leg after the interrupting ligatures have been placed through the skin following the type of the saphenofemoral surgery described above.

BILATERAL LIGATION

Then there is the question of operating on both legs at one time. Probably this could be done in most of the patients without any fear, but once in a while there is a patient who will refuse to get out of bed or walk after bilateral surgery because of the pain, whether real

or imaginary. These usually are hypersensitive and imaginative people. But if only one leg has been operated upon, they will cooperate by using at least one leg without any fear. As an example, I would like to cite a case.

A patient in her 40's with extensive varices, already had had two attacks of bilateral phlebitis in her saphenous system because she had been kept in bed, once on account of pneumonia, and another time because of an abdominal operation. She was a very apprehensive and sensitive type and yet she wanted to have her ligation done on both legs at the same time. Knowing her type, I refused. One leg was done first. Most of the patients jump out of bed soon after surgery and walk about freely, but she did this under protest and only after a great deal of persuasion. Later she thanked me for refusing her request, as she was certain that she could never have been up on her feet otherwise.

When the second leg was operated upon, the situation was the same. She did a lot of complaining when up. Had she had both of her legs done at the same time, I am convinced we would have been in serious trouble, since she already had a predilection for phlebitis as evidenced by her history. And one does not want to increase his morbidity or mortality record.

Though it is very seldom that my patients have a marked rise of temperature accompanied by tenderness along the great saphenous in the thigh on account of the sclerosing solution, the fact remains that had they had a bilateral retrograde injection this reaction would have been doubly hard on them.

ACUTE PHLEBITIS OF THE SAPHENOUS SYSTEM

Occasionally we see cases with acute thrombophlebitis in the great saphenous vein. If immediately ligated, these patients are saved from a great deal of suffering and loss of time. The ligation is done high and the cord-like section of the vein in the thigh resected for a few inches. Of course, no retrograde injection is done. However, if any section of the vein below becomes recanalized and in subsequent years shows the presence of incompetent perforating branches along its course, it may become necessary to place a few interrupted sutures through the skin at these levels. Without immediate surgery these patients, besides suffering, are disabled for weeks and are apt to develop further thrombosis by extension in the femoral, or to come down with embolism.

CONCLUSIONS

1. It has taken nearly twenty centuries to develop a simple technic for varicose vein surgery based on anatomical and physiological knowledge of the circulation in the leg. There are biochemical forces at work which need further investigation for prevention of varices. The history of surgical technic from the time of Celsus up to date is traced.

2. The more radical technics give 30 per cent "recurrences", 7 per cent embolism and 2 per cent deaths, besides being cumbersome, requiring prolonged hospitalization and producing scars. A thorough ligation of all tributaries at the saphenofemoral junction is a neater and simpler operation without any mortality or morbidity in competent hands, without hospitalization, loss of time, or unsightly scars, and yet with better and more lasting results.

3. Surgery should be done early before all the valves in the great saphenous have been entirely destroyed. To wait until the valves in the communicating branches have been destroyed or until ulcers have appeared is equivalent to treating your heart cases after a complete decompensation has set in or

operating on your appendix cases after the organ has been perforated.

4. Ulcerated cases, after a few days of treatment to clear up any superimposed infection, should also be operated upon early for quick recovery from the ulcers instead of waiting for them to heal up.

5. Anesthesia should be local, or sodium pentothal in the most apprehensive patients, so that patients may be made ambulatory right after surgery to prevent thrombosis and embolism.

6. The details of surgical technic with retrograde injection, including preoperative and postoperative care, based on over 300 cases, are outlined and illustrated with schematic figures.

SOMMAIRE

Après une revue de la littérature sur les varices, l'auteur nous dit qu'avec l'augmentation de nos connaissances du sujet, nous méthodes de traiter les varices deviennent de plus en plus simples. De son expérience avec plusieurs centaines de cas, il énumère certaines conditions essentielles et cite quelques conclusions. Il considère qu'il importe pour achever des guérisons, de faire une haute ligature de la veine grande saphène afin d'inclure les nombreuses branches de cette veine. Il préconise l'ambulation prompte du malade (quand c'est possible) pour prevenir la phlébite. Pour diminuer la confusion de nomenclature, il classifie ses malades en trois groupes, se basant sur les reactions individuelles classíques de fonction veineuse. Il nous cite les indications et les contreindicatures du traitement chirurgical et due traitement par injections sclerosantes.

RESUMEN

Cien años después de Cristo el romano Celso se convertía en el padre del tratamiento quirúrgico de las venas varicosas, al hacer incisiones sobre las várices a intervalos de 4 pulgadas, tocándolas luego con un cauterio y extrayendo el coágulo.

Desde entonces los cirujanos han continuado por casi 1800 años empleando modificaciones de esta técnica, pero nunca por encima de la rodilla. A causa del desconocimiento de la anatomía y fisiología, incluso hasta 1768, los cirujanos desangraban a los pacientes a extremos fatales, extrayendo sangre de las várices. Fué ya en el siglo XIX cuando la gran vena safena vino a ser el objetivo de ataque de los cirujanos, pero todavía habían de transcurrir 50 años antes de que la safena fuera inutilizada en su unión con la femoral. De todos modos, estas operaciones consistían en general en procedimientos tributarios de complicaciones y de un gran período de hospitalización y sus resultados no eran satisfactorios. Los mejores resultados atribuíbles a esta técnica están representados por un 30% de recurrencias, 7% de embolias y 2% de mortalidad.

La ligadura que empleamos hoy día con inyección retrógrada no va seguida de mortalidad alguna y la morbilidad es prácticamente nula en manos expertas. Con este método se require muy poca o ninguna hospitalización, de dn día o dos, y vuelve rápidamente a sus ocupaciones normales.

El mejor tratamiento de las várices sería el preventivo, pero casi nada podemos hacer a este respecto ya que el origen de la alteración es una diátesis heredada o bioquímica sobre la cual conocemos muy poco. Lo mejor es llevar a cabo la ligadura de un modo precoz antes de que el daño venoso sea grande.

Hay algunas contraindicaciones pero la edad no tiene nada que ver a este particular. Los casos cardíacos se com-

(Continued on page 618)

Vincent A. Lapenta, M.D., R.S.A. (Eng.), F.I.C.S.

The numerous friends and admirers of Dr. Vincent Lapenta of Indianapolis, Indiana, were shocked to learn of his death, following a brief illness, on Easter Eve, April 20th. He was 62 years old.

Dr. Lapenta was a native of Italy, where he received his M.D. degree in 1906. He came to the United States the next year, and settled in Indianapolis in 1911, where he served as Italian consul for many years. He specialized in abdominal surgery, and attained a considerable degree of distinction in this field. He was also the discoverer of a serum for the control of hemorrhage.

Dr. Simon Reisler, F.I.C.S., a long-time personal friend, says of him, "Dr. Lapenta's death was a shock that upset me completely; I can hardly bring myself to speak of it. To say that we shall miss him is an understatement.

"While I recognized his weaknesses, I also had the greatest admiration for the professed idealism which was fundamental to his being. His good advice could always be depended upon; his direct, straight-forward thinking and resolution were undeniable. His eagerness to reconcile opposing factions or points of view made him appear at times to vacillate in his loyalties; he would even, to meet some exigency, occasionally compromise with his idealism, but such were his weaknesses, the weaknesses possessed in some degree by each of us.

"His opinions I always respected; his ability I always admired. He was a resourceful master of surgery; he had an encyclopedic mind full of well-classified information. His knowledge of pathologic anatomy and physiology was amazing. His command of the fundamental sciences and of organic and physiologic chemistry, together with his inherent ability to draw instantly upon this store, helped him to achieve a degree of diagnostic and surgical acumen difficult to equal.

"It was my privilege to be closely associated with him for nearly twenty-five years, during which time we had many discussions of a philosophical nature. Having been trained originally for the priesthood, his spiritual and theological tendencies vied for expression with his scientific and artistic leanings and colored every thought and action of his career. In the philosophy of St. Thomas Aquinas, he found inspiration, satisfaction and solace. This gave him, not only a firm conviction of the supremacy of God, but also the courage to pursue that wisdom which is only achieved by discovering scientific truth and learning the meaning of the labor entailed in that pursuit.

"Though he never went to the battle fronts, Dr. Lapenta could truly be called a war casualty. The impact of new ideologies of a materialistic nature afflicted us all, individuals and nations, with confusion and error. To Dr. Lapenta, as much a fervant humanist as he was a strong nationalist, who continued to love the country that gave him breath no

less because he more greatly loved the land which gave him scientific and personal opportunity, the war and its hatreds caused incalculable suffering.

"The International College of Surgeons has reason to grieve the loss of one of its foremost champions. He believed greatly in the scope and effectiveness of the College as a teaching institution for surgery, as well as a great human influence in bringing about international friendship and cooperation."

Recognition of Dr. Lapenta's ability was international; he was decorated both by his native Italy and by Romania, holding the rank of Knight Commander of the Order of the Crown from both nations. He was also a member of the state commission of the Gorgas Memorial Institute of Tropical and Preventive Medicine, and belonged as well to a number of local and state organizations, both lay and medical, and was a Fellow of the British Royal Society of Arts.

Maurice Charles Hennessy, F.A.C.S., F.I.C.S.

Word has been received of the death, following a lengthy illness, of Dr. Charles Hennessy of Council Bluffs, Iowa, Regent of the Iowa Guild of the International College of Surgeons. He was 55 years old.

Once again we stand to pay tribute to one of that army of valuable and unassuming medical men who, in the smaller cities scattered across this great land, have, singly or in earnest groups, done so incalculably much for the advance of American medicine and surgery. There is, actually, little in Dr. Hennessy's life history that is unusual, yet in the very usualness of that history lie the seeds of his value to his community and his profession. Such men as this, of whom those who knew him personally could say, "Others might temporize and dissimulate but he was always frank and to the point . . . his sincerity was so evident that his candor cost him no friends," are all too rare in this imperfect world.

Dr. Hennessy was born in Iowa City, Iowa, educated in the public schools of that place and at the University of Iowa. He had just settled to practice in Council Bluffs, when he went into the medical corps to serve throughout World War I. In December 1918, he transferred from the Ninth Aero Squadron to help organize the ARC military hospital in Liverpool, England. He also served on the disability board of the AEF. Except for this military interlude, he practiced in Council Bluffs throughout his professional career. During World War II, he served as chairman of procurement and assignment of physicians for the armed services in the eleventh councillor district and on the medical examining board of his local draft board.

Dr. Hennessy was head of the Iowa State Cancer Committee for three years, and was a member of the staff of St. Bernard's Hospital in his native city. He was a Fellow both of the American and of the International Colleges of Surgeons, having been admitted to the latter in 1937, making him a Charter Fellow. He served as Vice-regent of what was formerly District Number 7 of the I.C.S., and became Regent when the change-over was made to State territories. He was a Fellow of the American Medical Association, a member of his state and county medical organizations and belonged to the Iowa Clinical Surgical Society. From 1932 onward, he served as councilor in the state group. From 1932 to 1937 he instructed in clinical surgery at Creighton University. He was also an associate member of Jennie Edmundson Hospital.

In addition to his medical activities, Dr. Hennessy served one term on the Council Bluffs Board of Education. He was also a member of the American Legion.

One of his four daughters, Mary Ellen Hennessy, is also a physician, now resident at Rochester, Minnesota.

ELEVENTH ANNUAL ASSEMBLY
OF
UNITED STATES CHAPTER
INTERNATIONAL COLLEGE OF SURGEONS

As this issue of the "JOURNAL" goes to press, final plans are getting into shape for the first real peace-time gathering of the United States Chapter of the International College of Surgeons. On the pages immediately following will be found details of various aspects of the program which the several committees have prepared for this occasion. For this reason, it is gratifying to know that a very large number of Fellows and Members

Dr. Herbert Acuff, President, U. S. Chapter, I.C.S.

Dr. Louis J. Gariepy of Detroit, Secretary of U. S. Chapter, International College of Surgeons; General Chairman for Detroit Assembly.

of the International College of Surgeons, as well as many guests, have indicated their intention of being present in Detroit for this Eleventh Annual Assembly from October 20 to 23, inclusive.

Last year, at the Tenth (Victory) Assembly in Washington, D. C., although technically, peace had been restored to the world, the shadows of war still hung heavily. Many of the Fellows and Members of the College were still in the Armed Forces of the United Nations and so were unable to attend. Many of those from Europe and Latin America,

whom we so greatly desired to have with us, were prevented by similar causes.

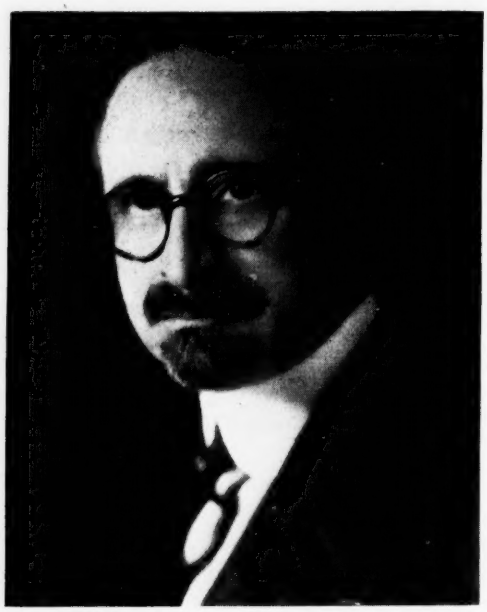
This year, most of such obstacles have been removed. We are happy and proud to welcome to this gathering many whose first opportunity it is to be with us. We are especially to be honored by the presence, during the programs, of a number of distinguished men of various nations whose world-wide reputations, both as surgeons and as writers on surgical subjects, are too well known to require recapitulation here.

In addition to the scientific portions of the program, a large number of scientific and technical displays, both of models and apparatus and of motion pictures have been arranged for. These are so planned as to form valuable auxiliaries to the lectures, and will be well worth the time and attention of everyone who attends this Assembly.

Prof. Arnold Jirasek, Prague, Czechoslovakia; First President of I.C.S.

The Convocation, always the colorful crowning point of Assembly schedules, promises to be by far the most memorable to date. The largest class of candidates in the history of the College is to be presented for induction and we are especially fortunate to have as the featured speaker of the evening, the distinguished former United States Ambassador to Japan, the Honorable Joseph C. Grew.

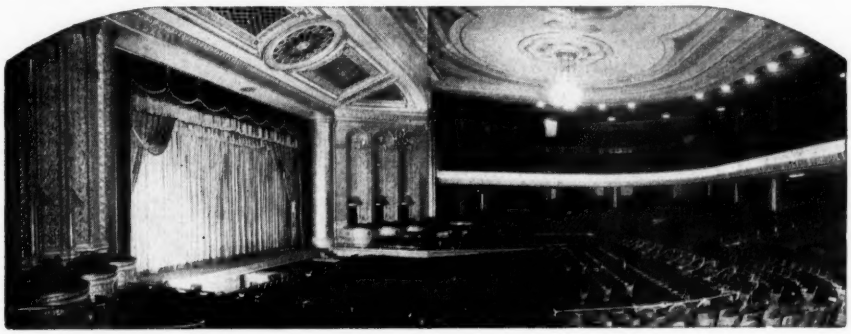
The Banquet which closes the session, will, as always, bring together a group of eminent speakers, chosen by the committee for their solid achievements in various fields of activity. These include Admiral of the Fleet Chester W. Nimitz; Vice Admiral Ross T. McIntyre, Surgeon General for the U. S. Navy; and Dr. Morris Fishbein, Editor of the "Journal of the American Medical Association."



Dr. Albert A. Berg, New York City, new President of the International College of Surgeons.

Mr. Hamilton Bailey, F.R.C.S., F.I.C.S. (Hon.), distinguished British surgeon, who will present a paper at Detroit Assembly entitled "Impending Death Under Anesthesia."

Prof. Dr. Alejandro Ceballos of Buenos Aires, Argentina; Member of the Board of Trustees, who will present a paper at Detroit Assembly.



Auditorium, Masonic Temple, Detroit, Michigan. In this auditorium, which seats more than six thousand persons, will be held the Convocation of the Eleventh Annual Assembly of the United States Chapter of the International College of Surgeons on the evening of October 22, 1946.

Schedule of Showing of Motion Pictures of Operative Procedures

Davis & Geck will present a series of surgical motion pictures during the intermission periods. Pictures to be shown represent classic and modern operations as performed by outstanding surgical authorities.

Through the D & G Surgical Film Library, over three hundred pictures are available to medical schools, hospitals and other accredited medical and surgical societies.

The Medical Film Guild's Library will show the following films daily:

Rehabilitation for Parkinson's Syndrome

(Color and sound—projection time—54 minutes)

This film, a landmark in teaching brain disorders, presents this subject in all embracing fashion as a motion picture textbook. The various clinical signs in the patient such as masked facies, spasticity, and tremors as well as conditions in athetosis introduce this subject. Anatomical structures and synaptic physiology are extensively depicted. Contributions in this field by Horsley, Meyers, Bucy, and Putnam are evaluated in comparison to the modern concept of Klemme who extensively analyzes 200 surgical cases. A complete operative procedure step by step is shown together with pre and post operative conditions of patients.

Non-Operative Treatment of Paranasal Sinusitis

(Color and sound—projection time—15 minutes)

This presentation is designed to outline an intelligent approach to the conservative management of those sinus infections that are encountered in the daily routine. Only simple proven forms of therapy are mentioned which have proven efficacious as demonstrated by many years of routine clinical employment.

Cervictitis—Etiology and Treatment

(Color and sound—projection time—50 minutes)

The cervix as a focus of infection for other uterine involvements is discussed from the etiological and anatomical viewpoints. An analysis is made showing the bactericides formerly used as compared to modern concepts of bacteriostasis including the sulfonamides and penicillin. A rationale for effective clinical treatment is developed from these studies. Classification shows cervical disease ranging from simple erosions to cystic conditions and on to further involvements requiring major surgery. Methods of cauterization and surgical repair using the Sturmdorf Tracheloplasty technique are illustrated. Research by several medical schools evolving a routine clinical treatment is statistically analyzed.

Treatment of the Major Neuralgias

(Color and sound—projection time—50 minutes)

Involvements affecting the spheno-palatine nerve the glosso-pharyngeal nerve and the trigeminal nerve are analyzed both anatomically and physiologically. The work of Erlanger (Nobel Prize Winner 1944) in nerve physiology is demonstrated. The interrelation of dental and medical problems are discussed. Typical case histories, both clinical and surgical, of patients with spheno palatine neuralgia, glossopharyngeal neuralgia and trigeminal neuralgia are presented. The procedure of the accurate differential section for surgical relief of trigeminal neuralgia overcoming eye complications is vividly shown and the results tabulated statistically.

Arterial Blood Pressure

(Color and sound—projection time—35 minutes)

Arterial blood pressure, its theory, physics and measurement. This film is designed to demonstrate the manner of keeping both aneroid and mercurial instruments in proper working order. The physics of blood pressure is developed at great length together with important research problems, explaining the theory of the sounds picked up by the stethoscope. Anomalies, such as auricular fibrillation, premature beats, coarctation of the aorta are identified. Facts of hypertension and hypotension are dealt with from the theoretical as well as the practical phases. Produced for the medical profession at large, medical schools in particular.

Management of Hypothyroidism

(Color and sound—projection time—35 minutes)

Differential diagnosis discusses variations between hyperthyroidism and hypothyroidism. The essential

clinical entities of hypothyroidism such as cretinism, juvenile, adult and pituitary myxedema are dealt with in great detail, with typical patients shown. Effect on the metabolism is depicted pharmacologically and clinically, by tests on animals to the cumulative effect on the patient. The recommended therapy to restore the patient to normal is analyzed thoroughly.

Management of the Failing Heart

(Color and sound—projection time—35 minutes)

Impairment of heart function due to auricular fibrillation, constrictive pericarditis, pericardial effusion, and effects on the respiratory system are shown. The management of the patient in heart failure shows how salt restriction maintains the extracellular fluid in proper balance to reduce edema. Effects of mercurial diuretics and new potent digitalis derivatives are evaluated.

Film catalogs will be available at Cinema Room A where the pictures will be shown. Following is the program of films:

Dr. Custis Lee Hall, Washington, D. C., President-Elect, United States Chapter.

MONDAY

3:30 to 4:00 ASEPTIC ILEOCOLOSTOMY and resection of right colon for cancer. Dr. Fred W. Rankin, Lexington, Ky.

5:00 to 5:30 PARTIAL RESECTION OF THE STOMACH for Duodenal Ulcer. Samuel F. Marshall, M.D., Lahey Clinic, Boston.

Dr. Morris Fishbein, F.I.C.S. (Hon.), Editor of the "Journal of the American Medical Association"; guest speaker.

5:30 to 6:00 DELIVERY OF QUADRUPLETS by cesarean section. Dr. John C. Ullery—Phila. Lying In Hospital.

TUESDAY

8:30 to 8:40 SURGICAL TREATMENT OF HYPERTENSION by Lumbodorsal Splanchnicectomy. R. H. Smithwick, M.D., Massachusetts Gen. Hospital.

TUESDAY

8:40 to 9:00 RIGHT PNEUMONECTOMY for Primary Carcinoma of the Lung. Dr. Richard H. Overholt, New England Deaconess Hospital.

Prof. Dr. Raul David de Sanson of Rio de Janeiro, Brazil; guest speaker.

10:30 to 11:00 BILATERAL FEMORAL VEIN INTERRUPTION for the Treatment of Deep Venous Thrombosis and Pulmonary Embolism. Robert R. Linton, M.D., Boston, Mass.

12:00 to 12:30 UPPER SELECTIVE THORACOPLASTY FOR PULMONARY TUBERCULOSIS operation performed in three stages: With intervals of 10 to 14 days. Dr. Richard H. Overholt and Associates, Boston.

12:30 to 1:20 TRANSTHORACIC PARTIAL GASTRECTOMY with Intrathoracic Esophageo-gastric Anastomosis for Carcinoma of the Cardia. Richard H. Sweet, M.D., Massachusetts General Hospital.

TUESDAY

1:20 to 1:45 ESOPHAGEAL DIVERTICULUM —Lahey's two-stage operation for diverticula of the pulsion type. Dr. Frank H. Lahey, Boston.

1:45 to 2:00 COMPLETE LACERATION OF THE PERINEUM. Dr. Louis E. Phaneuf, Boston.

3:30 to 4:00 LEFT UPPER LOBECTOMY for pulmonary tuberculosis. Dr. Richard H. Overholt and Associates, Boston.

5:00 to 5:30 CHOLELITHIASIS with common duct stone. Dr. Ralph Bettman, Rush Medical College, Chicago.

5:30 to 6:00 JOINT DEBRIDEMENT. Experimental and clinical findings in the surgical treatment of arthritis. Dr. Paul B. Magnuson, Northwestern Univ. Medical School.

WEDNESDAY

8:30 to 9:00 SUPPORT OF THE PARALYZED FACE WITH FASCIA. Drs. J. Barrett Brown and F. R. MacDowell, Washington Univ. School of Medicine.

10:30 to 11:00 KERATOPLASTY—Square and Circular Transplant Technics. Dr. Ramon Castroviejo, Institute of Ophthalmology, Columbia Presbyterian Medical Center, New York.

12:00 to12:45 PANCREATO-DUODENAL RESECTION for Carcinoma of the Head of the Pancreas or Carcinoma of Ampulla of Vater, Dr. Richard B. Cattel, Lahey Clinic, Boston.

12:45 to 1:35 SURGERY OF THE COMMON BILE DUCT. Dr. Charles B. Pruestow, Univ. of Illinois, School of Medicine.

1:35 to 2:00 INGUINAL HERNIA. Dr. F. M. Al Akl, Kings County Hospital, Brooklyn.

Hotel Accommodations at the Detroit Assembly

As mentioned earlier, Dr. Charles W. Husband is Chairman of the Housing Committee for the Eleventh Annual Assembly of the American Chapter of the International College of Surgeons. Dr. Husband and his committee members are especially urging all those who plan to attend this gathering to bear in mind that the housing situation is still extremely acute, especially in an overcrowded industrial city like Detroit.

The Committee has already lined up all available hotel space and will make every possible effort to see that rooms are provided for everyone. They can, however, only function efficiently, if everyone who plans to be in town for any part of the Assembly program will coöperate with them fully by observing certain simple precautions. They earnestly request all who are to be in the city overnight, or longer, to

1. Plan as far ahead as possible;

2. Advise the Committee, by mail, at the earliest possible moment, of the exact hour of arrival and length of stay planned;

3. Give first, second *and third* choice of hotel. All requests for hotel rooms are being cleared through the Housing Committee; every effort will be made to place visitors in the hotel of their choice, but naturally, they can only, in fairness to all concerned, handle requests in the order in which they are received;

4. Accept a share in a double (or larger) room, if attending the Assembly alone, as *very few* single rooms are available. "Doubling up" will help everyone—and sometimes, incidentally, leads to the formation of delightful new acquaintances.

A blank application form and list of Detroit's hotels will be found below and in the Advance Program of the Assembly which has already gone out through the mails to the membership or may be obtained by writing direct to Dr. L. J. Gariepy, Secy., 16401 Grand River Avenue, Detroit 27, Michigan.

Hotels — Detroit

	Minimum Rate Single	Double
Barlum Hotel, 111 Cadillac Square	$2.50	$3.50
Book-Cadillac Hotel, Washington Blvd. at Michigan Avenue	3.50	5.00
Briggs Hotel, 114 West Adams Avenue	1.50	3.50
Detroiter Hotel, 2560 Woodward Avenue	3.00	4.00
Dearborn Inn, Dearborn, Michigan	4.00	7.00
Detroit-Leland Hotel, Cass and Bagley Avenues	2.50	4.00
Fort Shelby Hotel, Lafayette at 1st Street	2.50	4.00
Imperial Hotel, Peterboro at Woodward Avenue	...	3.00
Madison-Lenox Hotels, Madison Avenue at John R Street	1.75	2.75
Norton Hotel, Jefferson at Griswold	2.00	4.00
Park Avenue Hotel, Corner Park and Sproat	2.50	3.50
Prince Edward Hotel (W)	1.00	4.50
Hotel Statler, Washington Blvd. and Grand Circus Park	3.00	5.00
Hotel Tuller, Park and Adams	2.50	4.00
Wardell Sheraton Hotel, Woodward at Kirby	3.00	5.00
Webster Hotel Hall, 5050 Cass Avenue With B.	2.50	4.00
Lee Plaza Without B.	1.50	3.00
Wolverine Hotel, 55 E. Elizabeth Street	2.00	4.00

DR. CHAS W. HUSBAND, *Chairman*
Housing Committee
INTERNATIONAL COLLEGE OF SURGEONS,
1005 Stroh Bldg.
DETROIT 26, MICHIGAN.

DEAR SIR:

Please make hotel reservation(s) as indicated below:

Hotel ..... *(1st choice)*
Hotel ..... *(2nd choice)*
Hotel ..... *(3rd choice)*

.. (Single Room(s)) Rate $.....
.. (Double Room(s)) for .... persons Rate $.....
.. (Twin Bedded Room(s)) for .... persons Rate $.....

Arriving October.....hour.....A.M.....P.M.
Leaving October.....hour.....A.M.....P.M.

(Names and addresses of all applicants including person making reservation)

NAME	ADDRESS	CITY	STATE
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

Date..... *Signature*.....

AN INVITATION

Three groups of paintings—the work of three contemporary American artists, Dean Cornwell, Rockwell Kent and James Chapin—will be on display during the period of the Eleventh National Assembly of the United States Chapter of the International College of Surgeons in Detroit, October 21, 22 and 23.

These famous paintings and drawings depicting medical history and development will be shown in the Fine Arts Galleries of The J. L. Hudson Company. All attending the Assembly and their families and friends are cordially invited to view the exhibition.

The Cornwell group, done for Wyeth, Incorporated, of Philadelphia, is a series of six unusual paintings entitled "Pioneers of American Medicine," and have been exhibited under the auspices of medical societies and universities throughout the United States and Canada.

Rockwell Kent has on exhibit six drawings conceived as an expression of the mental symptoms of various diseases, and done for the Schering Corporation of New Jersey.

A series of seven paintings known as "The Seven Ages of a Physician," were created by James Chapin for Ciba Pharmaceutical Products, Incorporated, of New Jersey. This group of paintings has been designed as a tribute to the science of healing and to those great men of medicine whose devout selflessness has had an almost religious significance.

(Continued from page 608)

portan mejor después de la ligadura alta. Teniendo en cuenta que el paciente debe comenzar a andar una vez pasada la fase operatoria a fin de evitar trombosis y embolias, la anestesia en estas circunstancias debe ser local con una cierta medicación previa y en algunos pacientes muy nerviosos puede emplearse el pentothal sódico.

El sitio para la intervención quirúrgica es la fosa oval, debiendo ligarse todas las ramas de la unión safenofemoral. La safena debe ligarse doble y aproximada lo más posible a la femoral. Para la inyección retrógrada empleo de 3 a 5 cc. de monolato. Es importante un vendaje firme pero no muy pretado.

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IMPORTANT NOTICE

TO MEMBERS OF THE UNITED STATES CHAPTER OF THE INTERNATIONAL COLLEGE OF SURGEONS

Some time ago each member of the United States Chapter received a copy of a "Questionnaire" form, intended to assist the Business Office in compiling certain important data on the membership. The response to this mailing has been generous. However, some of these forms have not yet been returned; the Business Secretary is most anxious to complete his records as soon as possible. If you have not already done so, will you please complete and return your "Questionnaire" form *at your earliest convenience* to Mr. Ralph E. Osborne, 1512 Spruce Street, Philadelphia 2, Pa.

SCIENTIFIC EXHIBITS

The following have taken space for scientific exhibits at the Detroit Assembly:—

HENRY TURKEL, M.D., AND ASSOCIATES

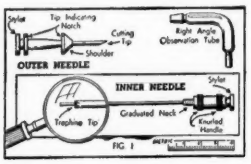


FIG. 1

Booth No. 15

Administering Fluids Through Bone Marrow

DR. E. S. GURDJIAN

Detroit, Michigan

Booth No. 16

Brain Surgery

DRS. HARRY E. BACON AND LOWRAIN E. McCREA

Temple University Medical School & Hospital,

Philadelphia, Pennsylvania

Booth No. 17

Surgical Treatment of Rectal Cancer and Management of Association Vesical Dysfunction

A. A series of moulage models on electric turntable discloses various premalignant and malignant lesions. Based on a series of 460 cases of rectal and sigmoidal cancer, pre- and postoperative management is presented, technic of surgical removal and eliminating the abdominal colostomy, and means of preserving the sphincter musculature are shown. In spite of the high rate of resectability (81.3 per cent), the mortality is low (6.2 per cent), the period of hospitalization in short (13.7 days), return to work early, the sphincter function is definitely good, 95 per cent of normal. The survival rate as to three year cure is 58.8 per cent and five year cure is 50.2 per cent both for palliation and cure. *B.* Kodachrome transparencies show normal distribution of nerve supply to bladder, the surgical distribution of the hypogastric plexus during proctosigmoidectomy. Another series of drawings depicts cystometric readings prior to, immediately following the surgical procedure and following return to normal. A series of moulage models shows various bladder lesions in association with rectal malignancy as viewed through the cystoscope.

JOHN PICK, M.D.

Chicago, Illinois

Booth No. 18

War Wounds

MT. CARMEL MERCY HOSPITAL

Detroit, Michigan

Booth No. 19

A Kodachrome Exhibit of Gallbladder Disease

This exhibit of over one hundred 3¼ x 4 inch kodachrome projections from the Laboratories of Mount Carmel Mercy Hospital, Detroit, Michigan, illustrates the various pathologic conditions found in the gallbladder. Acute, subacute and chronic cholecystitis and cholelithiasis are emphasized. In addition, a few mounted gross specimens will be displayed.

DR. OTTO C. HUDSON

Hempstead, New York

Booth No. 20

Fractures in a Suburban Hospital

The exhibit will be 8 x 10 translite films of fractures seen in a Suburban Hospital. Various types of fractures and type of treatments will be shown. Problem fractures only will be exhibited with preoperative, postoperative and end result X-rays.

STRAITH CLINIC FOR PLASTIC SURGERY

Detroit, Michigan

Booth No. 21

Plastic Surgery

Exhibit will consist of numerous colored photographs and transparencies illustrating the usual problems of reconstructive surgery handled in a plastic surgery clinic.

ALFRED H. WHITTAKER, M.D.

Detroit, Michigan

Booth No. 46

Operative Treatment of Fractures of the Os Calcis

Exhibit is presented by means of photographs, drawings and transparencies, illustrating the conventional methods of treatment of fractures of the os calcis, the anatomical structure of the bone, the mechanics of the fracture, the difficulties of anatomical restoration are presented. Operative reduction is illustrated with end results, and reduction of disability.

E. J. ORBACH, M.D.

New Britain, Connecticut

Booth No. 47

Therapy of Varicosities

(Technic, statistics and theory demonstrated by means of Kodachrome pictures, sketches, tables and 1 instrument.)

1. Sclerotherapy of varicose veins utilizing an intravenous air-block.
2. Blood-Kaolin-Penicillin Paste in the treatment of varicose ulcers.
3. Ligation knife facilitating subcutaneous ligation of varicose veins.
4. Ambulatory treatment of acute superficial thrombophlebitis.
5. Padded versus skin tight Unna's boot.

LAMSON LABORATORIES

Seattle, Washington

Booth No. 126

Lamson Appliance for Colostomy Control

The Lamson Appliance for Colostomy Control consists of a plastic disc to which a rubber tube with balloon is attached. The control is brought about by the inflation of the rubber balloon through a valve in the center of the disc after it has been inserted in the colostomy opening. The appliance is adjusted to each case so that the distance between the inflated balloon and disc equal the thickness of the abdominal wall.

R. C. CHAFFIN, M.D.

Los Angeles, California

Booth No. 127

Surgical Drainage by Continuous Suction

Exhibit is one to show the actual technique of continuous suction drainage of all surgical fields.

Moulages to show actual operation of the drainage by demonstration.

Diagrammatic drawings showing the Chaffin Drainage Tube in several fields.

Charts and statistical evidence that death should rarely occur from surgical infection.

DR. A. P. HUDGINS

Charleston, West Virginia

Booth No. 128

Office Method for Hystero-salpingography

A new self retained, screw type cannula with valve, permitting the injection of opaque media in the physician's office. The patient walks to the X-ray office, has one thirty minute flat plate and returns for removal of cannula. The cannula may be retained for twenty-four hours for therapeutic effect.

JOHN O. RAO, M.D.

Detroit, Michigan

Booth No. 129

Urologic Complications in Cancer of Cervix

WILLIAM E. JOHNSTON, M.D. AND DONALD C. BEAVER, M.D.

Detroit, Michigan

Tumors of Lateral Aberrant Thyroids

Lateral aberrant thyroid tumors are of sufficient importance to warrant a better understanding of their nature, location, diagnostic criteria, pathology and treatment. It is with this view in mind that this exhibit was prepared. The knowledge of lateral aberrant thyroid tumors was advanced through the contributions of Lahey, Crile, Moritz, Cattell and others. Their work is reviewed and new cases are added from the Woman's Hospital.

DR. DONALD C. BEAVER

Woman's Hospital, Detroit, Michigan

Gynecological Pathology

TECHNICAL EXHIBITS

ELEVENTH NATIONAL ASSEMBLY
of the
UNITED STATES CHAPTER
of the
INTERNATIONAL COLLEGE OF SURGEONS
Masonic Temple
Detroit, Michigan, October 21 through 23, 1946

The latest in pharmaceuticals, surgical apparatus and instruments, medical books and products of special interest to surgeons will be on display.

Members and visitors are urged to study these exhibits during recess periods, which will be arranged at frequent and appropriate intervals.

Following are the names of the firms exhibiting and descriptive items.

MICHIGAN MEDICAL SERVICE

Detroit, Michigan
Booth No. 1

Largest voluntary prepayment medical-surgical plan in the United States. Charts of progress for past year and past six years of operation: (a) Paid to Doctors for Services Rendered; (b) Number of Services Rendered; (c) Growth in Subscribers and Services Rendered; (d) Percentage of Income Paid for Administrative Costs; and (e) Assets and Liabilities.

W. B. SAUNDERS COMPANY

Philadelphia, Pennsylvania
Booth No. 2

Mr. Frank Patterson will represent this publishing house and will exhibit its complete line of books, including Bockus' 3-volume work on "Gastro-enterology," new (5th) edition of Beckman's "Treatment," Allen, Barker & Hines' "Peripheral Vascular Diseases," new (2nd) edition of Mason's "Preoperative and Postoperative Care," new (2nd) edition of Graybiel & White's "Electrocardiography," new (3rd) edition of Andrews' "Diseases of the Skin," Cooke's "Allergy," new (5th) edition of Curtis "Gynecology," Jackson & Jackson's "Diseases of the Nose, Throat and Ear," (4th) edition of Mitchell & Nelson's "Pediatrics," and many others.

ZIMMER MANUFACTURING COMPANY

Warsaw, Indiana
Booth No. 3

Mr. C. A. Fisher will be in charge of the Zimmer booth, which will have on display a representative line of fracture equipment, and will gladly demonstrate the use of any items in which the doctors are interested. New items of interest will be Hopkins Hip Nail Extension, Two Speed Hand Drill, Bone Clamp Set, and many others.

RANDOLPH SURGICAL SUPPLY COMPANY

Detroit, Michigan
Booth Nos. 4, 5

SAM'S DRUG DEPT., INC.

Detroit, Michigan
Booth No. 6

REXAIR, INC.

Detroit, Michigan
Booth No. 7

ORTHOPEDIC FRAME COMPANY

Kalamazoo, Michigan
Booth No. 8

The Stryker Cast Cutter will be demonstrated. This electric saw does not rotate but oscillates, thus cutting the cast, which is rigid, but not the padding and skin beneath "which gives" with the oscillations. You won't believe it, even when you see it.

The Stryker Turning Frames, used extensively in military hospitals and now available for civilian use, will also be demonstrated.

D. R. COON COMPANY

Detroit, Michigan
Booth No. 9

SCHENLEY LABORATORIES, INC.

New York, New York
Booth No. 10

The Schenley Laboratories' exhibit is devoted entirely to Penicillin and Penicillin products. A series of transilluminated Kodachromes of various pyogenic skin infections shows the therapeutic efficacy of Penicillin Ointment Schenley. A well-informed attendant will gladly discuss any phase of Penicillin therapy and developments with interested physicians.

NUTRITION RESEARCH LABORATORIES

Chicago, Illinois
Booth Nos. 11, 12

Nutrition Research Laboratories, Booths 11 and 12, will feature Ertron Steroid Complex in chronic arthritis. Both the oral and parenteral forms of Ertron will be displayed.

Other products to be exhibited are Infron Pediatric in rickets prophylaxis and Bezon, high potency Whole Vitamin B Complex with Vitamin C.

New clinical reprints and descriptive literature pertaining to our products will be available at the booths which will be attended by our representatives, Mr. H. H. Baker, Mr. P. V. Trenkmann and Mr. W. E. Vennard.

BARD-PARKER COMPANY, INC.

Danbury, Connecticut

Booth No. 13

Bard-Parker Rib-Back surgical blades; Surgical knife handles; Long knife handles for deep surgery; Bard-Parker Germicide and instrument containers; Transfer forceps; Hematological case for obtaining bedside blood samples.

W. A. BAUM COMPANY, INC.

New York, New York

Booth No. 14

All models of the well known Lifetime Baumanometer are again available in all of their pre-war perfection and will be on display. Get the facts about the Baumanometer first-hand. Consider the practicability of converting your old Baumanometer into one of our very latest models with die-cast Duralumin Case, Air-Flo Control and other exclusive features.

OTTO K. BECKER & COMPANY

Detroit, Michigan

Booth No. 15

CAMEL CIGARETTES

New York, New York

Booth Nos. 22, 23

Camel Cigarettes will present a dramatic full color review of their recent medical research on smoking, as well as the details of the nationwide survey showing that "More Doctors Smoke Camels Than Any Other Cigarette." Another panel will illustrate the absorption of nicotine in the respiratory tract. Representatives will be present.

ACME ENGINEERING COMPANY

Greensboro, North Carolina

Booth No. 24

The Acme Engineering Company will display the most recent improvements in Internal and External Fixation for long bones.

The Collision Cruciate Head Bone Screw, (with pilot point) Non-breakable Drill, Drill Guide, Cruciate Head Screw Driver, and the improved Bone Plate has been approved by the Army and Navy Medical Board and is now being used by the Army, Veterans Hospitals, and several Medical Schools.

The Haynes Long Bone Reduction Apparatus and External Splint for long bones is rapidly becoming popular with the progressive surgeon. This splint has many advantages when it is used by the surgeon who understands its mechanical functions.

The Lloyd Hip Screw for fractures of the neck of the Femur and its blind method of application will be welcomed by the surgeon who performs this type of surgery.

We are looking forward to the opportunity of meeting you at our booth.

ETHICON SUTURE LABORATORIES

DIVISION OF JOHNSON & JOHNSON

New Brunswick, New Jersey

Booth No. 25

DEPUY MANUFACTURING COMPANY

Warsaw, Indiana

Booth No. 26

DePuy will feature the new DePuy Orthopedic Screw Driver Set. The master screw driver will not drop the screw. It grips completely around the head of any Sherman Type Screw. A new low speed hand bone drill will be on display. When inserting Steinman Pins this eliminates burning of the bone walls. It is geared 2½ to 1. A complete line of splints are on display.

C. V. MOSBY COMPANY

St. Louis, Missouri

Booth No. 27

The C. V. Mosby Company extends a cordial invitation to visit Booth No. 27, where a representative line of medical publications will be displayed. Mr. Arthur C. Graybuck will be in attendance and glad to discuss your book needs with you.

MACALASTER BICKNELL COMPANY

Cambridge, Massachusetts

Booth No. 28

This interesting exhibit will display the FENWAL SYSTEM for the simplified preparation, storage and administration of parenteral fluids, reusable equipment for whole blood collection, processing to plasma, storage and administration; a unique consolidated Tube and Needle Set featuring a single vent tube and expendable transparent plastic tubing. Your inspection is cordially invited.

SPENCER INCORPORATED

New Haven, Connecticut

Booth No. 29

Spencer Individually Designed Supports for patients who have undergone mastectomy will be of special interest to surgeons. Also displayed are Individually Designed Spencer Supports which doctors are prescribing for postoperative needs; inoperable hernia; antepartum and postpartum wear; visceroptosis and nephroptosis with symptoms; breast conditions, and spinal conditions.

J. B. LIPPINCOTT COMPANY

Philadelphia, Pennsylvania

Booth No. 30

A complete display of Lippincott Selected Professional Books designed to fill the real needs of the medical profession. Presenting outstanding works on surgical treatment of the motor-skeletal system, nervous system, soft tissues, surgery of the hand, the breast, conduction anesthesia, operative gynecology, peripheral nerve injuries, thoracic surgery. Advance information on other new books and new editions in preparation.

THE KURT COMPANY

Detroit, Michigan

Booth No. 31

HOLLAND-RANTOS, INC.

New York, New York
Booth No. 33

You are cordially invited to visit the Holland-Rantos booth where on display will be the nationally known and universally used Koromex contraceptive specialties. Besides the new Koromex Set Complete, which is a package combining the necessary items for complete contraceptive technique, will be the new Nylmerate Jelly introduced only a short time ago and received enthusiastically for the treatment of trichomoniasis and vaginal discharges of a non-specific origin.

Representatives of the company will be on hand to answer all questions. Samples of Nylmerate Jelly and Koromex Jelly will be available, as will copies of the Dickinson-Freret Chart.

FARNSWORTH LABORATORIES

Chicago, Illinois
Booth No. 34

We invite you to talk with our representative on
ELIMINATION OF PAIN WITH QUINOCAINE
HEMORRHAGE CONTROL WITH VITAMIN K_3
Literature covering the above treatments may be obtained upon request
FARNSWORTH LABORATORIES
28 EAST JACKSON BLVD.
CHICAGO 4, ILLINOIS

C. B. FLEET COMPANY, INC.

Lynchburg, Virginia
Booth No. 35

Phospho-Soda (Fleet) has been an ethical product for over half a century. It is a pure, stable, aqueous concentrate of the two U.S.P. sodium phosphates. It is indicated in hepatic and gallbladder dysfunctions, and when a thorough eliminating action is desired. It possesses rapidity and mildness of action with marked absence of nausea, griping or tenesmus.

BECTON, DICKINSON & COMPANY

Rutherford, New Jersey
Booth No. 36

PARKE, DAVIS & COMPANY

Detroit, Michigan
Booth Nos. 37, 38

Staff Members of PARKE, DAVIS & COMPANY, well informed concerning progress in Pharmaceutical and Biological Research, and desirous of presenting new advancements to you, will be in attendance at our Technical Exhibit to discuss the nature and employment of new medicinal and surgical products. Featured at this Exhibit will be THROMBIN, TOPICAL, a standardized, sterile hemostatic protein obtained from plasma, intended for topical application to control capillary bleeding and to promote rapid adhesion of traumatic and clean wound edges. Your visit to this Exhibit is sincerely solicited.

WM. MEYER COMPANY

Chicago, Illinois
Booth No. 39

In Booth 39, The Wm. Meyer Co. of Chicago will again feature their famous Head and Specialty X-Ray Unit. Their exhibit will be in charge of Mr. A. B. Stuart of Michigan X-Ray Sales, Detroit, and Mr. J. Victor Feather, Eastern Field Representative.

LIEBEL-FLARSHEIM COMPANY

Cincinnati, Ohio
Booth No. 40

It will be a privilege for The Liebel-Flarsheim Company to exhibit their latest model BOVIE electrosurgical units at the 1946 convention of the United States Chapter of the International College of Surgeons. The company and its representatives cordially invite you to visit their booth No. 40 for examination and demonstration of the latest developments in their electrosurgical apparatus.

FREDERICK STEARNS & COMPANY

Detroit, Michigan
Booth No. 41

You are cordially invited to visit the exhibit of Frederick Stearns & Company Division.

Neo-Synephrine Hydrochloride products for intranasal, parenteral and ophthalmic use will be featured.

Parenamine (Amino Acids, Stearns)—a complete mixture of amino acids derived from the acid hydrolysate of casein fortified with pure dl-tryptophane to the extent of 1% of the total amino acids.

Our professional staff will be in attendance to discuss these products with you.

HOFFMAN-LA ROCHE, INC.

Nutley, New Jersey
Booth No. 42

Pharmaceutical prescription specialties of rare quality produced at Roche Park, where vitamins are made by the ton, will be exhibited. The medical profession's interest in PER-OS-CILLIN, the new stable oral Penicillin; the versatile parasympathetic stimulant Prostigmin; and other scientific accomplishments will be satisfied by Hoffman-La Roche representatives who will be in attendance to discuss clinical problems.

AMERICAN STERILIZER COMPANY

Erie, Pennsylvania
Booth Nos. 43, 44, 45

An entirely new model of the MacEachern Obstetrical Table will be featured with the ever-popular Albee-Comper Fracture Table. The 1945 model of the head-end-controlled "American" Surgical Operating Table will also be demonstrated with a live model to simulate true posturing facilities for the different operations in the surgical category.

The Craig Head Rest, and new Sheldon Head Rest for frontal craniotomies will also be demonstrated, and our new "Luminaire" Surgical Light will be suspended above the Tables in full working order—shadow reduction qualities and illumination intensities for deep cavity penetration will be there for your examination. Doctors' Office Sterilizers—both Cabinet and Portable models—will also be on exhibit.

Adrian Comper, Maxfield Smith and Harold Klebes are experienced in the mechanics of Surgical Posturing and Illumination Techniques, and are qualified to demonstrate to you with live models.

JOURNAL OF THE INTERNATIONAL COLLEGE OF SURGEONS

Booth No. 48

SOUTHERN DRUG & MFG. CO.

Knoxville, Tennessee
Booth No. 49

AYERST, McKENNA & HARRISON, LTD.

New York, New York

Booth No. 50

"Premarin" is a potent preparatiod of naturally-occurring, water-soluble equine conjugated estrogens containing sodium estrone sulphate as one of its estrogens.

"Premarin" combines a high degree of potency with convenience of admidistration and is well tolerated by the patient. It is supplied with the approval of the Research Institute of Endocrinology, McGill University, and is accepted by the Council of Pharmacy and Chemistry of the American Medical Association.

WM. R. NIEDELSON

Detroit, Michigan

Booth No. 51

The first showing of the newest cardiographic improvement in years, the CARDIOTRON, a direct-writing type, will be made at our exhibit. This instrument will eliminate photographic processes, batteries, and give permanent records.

Also on view will be the latest model Jones "MOTOR-BASAL", the original waterless BMR unit.

WINTHROP CHEMICAL COMPANY, INC.

New York, New York

Booth No. 52

Winthrop Chemical Company, Inc., extends a cordial invitation to visit Booth No. 52 where representatives will gladly discuss the latest therapeutic contributions made by this firm.

A. S. ALOE COMPANY

St. Louis, Missouri

Booth No. 53

MEAD JOHNSON & COMPANY

Evansville, Indiana

Booth Nos. 55, 56

"Servamus Fidem" means We Are Keeping the Faith. Almost every physician thinks of Mead Johnson & Company as the maker of Dextri-Maltose, Pablum, Oleum Percomorphum, and other infant diet materials—including the new precooked oatmeal cereal, Pabena. But not all physicians are aware of the many helpful services this progressive Company offers physicians. A visit to Booths Nos. 55 and 56 will be time well spent.

PHILIP MORRIS & CO., LTD., INC.

New York, New York

Booth No. 57

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.

D. C. LIVINGSTON PHARMACY

Detroit, Michigan

Booth No. 58

SCHERING CORPORATION

Bloomfield, New Jersey

Booth No. 59

The Schering exhibit will feature the latest developments in endocrine therapy, radiographic aids and other pharmaceutical advances.

Of particular interest is the presentation of Combisul-TD. Combisul-TD is a sulfonamide combination based upon the now proved therapy which offers the therapeutic benefits of sulfathiazole and sulfadiazine with a material decrease in the danger of renal toxicity and crystalluria.

Schering professional service representatives will be present to answer inquiries and to provide valuable, informative literature.

E. & J. MFG. COMPANY

Philadelphia, Pennsylvania

Booth No. 60

MICHIGAN BELL TELEPHONE COMPANY

Detroit, Michigan

Booth No. 62

AMERICAN SAFETY RAZOR CORPORATION

Brooklyn, New York

Booth No. 63

A. S. R. SURGEON'S BLADES inspire confidence. Designed for the surgeon by craftsmen who are specialists they are famous for their keenness, dependability, and assured balance. Visit Booth #63 and convince yourself that there is an A. S. R. SURGEON'S BLADE to meet your every surgical need.

Also on view, A. S. R. Sanitary Bed Pan Covers. New, revolutionary, made of paper, easily disposable, guarantee improved sanitary technic.

SURGITUBE PRODUCTS CORPORATION

New York, New York

Booth No. 64

Surgitube A seamless gauze fabric in tubular form, in rolls of 50 yards packaged in handy dispensing box. Produced in five sizes for application as dressing to fingers, toes, hands, feet, arms, legs, breasts and head. The patented technique produces a degree of elasticity and flexibility that insures easy application and ready removal, plus perfect conformation without any binding affect.

DETROIT MEDICAL ARTS PHARMACY, INC.

Detroit, Michigan

Booth Nos. 65, 67

The Detroit Medical Arts Pharmacy will feature Royal Chrome furniture for the doctor's office, Universal X-Ray Machines, Majestic Short Wave Units and a complete booth of Medical Arts Pharmacy and pictures of those who serve the doctors.

SHARP & DOHME, INC.

Philadelphia, Pennsylvania

Booth No. 66

Sharp and Dohme will have their display at Booth No. 66 featuring Tyrothricin Concentrate for Human use, "Lyovac," Normal Human Plasma, "Sulfathalidine," and "Sulfasuxidine." Messrs. Held and Galbreath will be in attendance to welcome all visitors.

MEDICAL FABRICS

Paterson, New Jersey

Booth No. 69

MENNEN COMPANY

Newark, New Jersey

Booth No. 70

The Mennen Company will exhibit their two baby products—Mennen Baby Oil and Mennen Baby Powder-Borated, in addition to their fungicidal foot powder—Quinsana, their NEW prickly heat powder—Quicool, and Mennen Skin Balm.

Mennen Baby Oil is Antiseptic and is now being used routinely by the majority of hospitals that are important in maternity work.

CIBA PHARMACEUTICAL PRODUCTS, INC.

Summit, New Jersey

Booth No. 71

Ciba invites you to visit its exhibit at Booth No. 71. Among the products displayed will be: PRIVINE, a powerful, long-acting, nasal vasoconstrictor; METANDREN Linguets, a potent androgen for sublingual administration; TRASENTINE, the synthetic antispasmodic; TRASENTINE-PHENOBARBITAL and many others.

Representatives in attendance will gladly discuss these and other Ciba products with you.

J. H. EMERSON CO.

Cambridge, Massachusetts

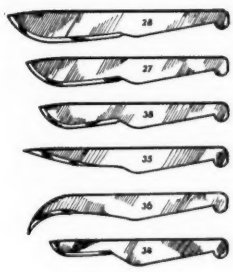
Booth No. 72

All models of the Emerson Resuscitator for hospital, ambulance and private practice use will be shown. Also the Emerson Hot Pack Apparatus which heats, moistens and wrings out packs in two minutes, as well as late developments of the Emerson Respirator such as the Respiration Dome, which breathes for the patient while the respirator is open.

RUDOLPH BEAVER, INC.

Waltham, Massachusetts

Booth No. 73



The Beaver knife is completely interchangeable—every blade fits every handle; only Beaver has new blade shapes that permit improved techniques; the blades are ⅓ thicker, without a hole, and much stronger; the blade is free from side obstruction of the handle; it will not pick up gauze; the holding mechanism is simpler and cleaner; the blades are made with the grain of the steel at right angles to the cutting direction. It is extensively exported.

F. E. YOUNG & COMPANY

Chicago, Illinois

Booth No. 75

"F. E. Young & Co., 422 E. 75th St., Chicago, Ill., Booth 75. Manufacturer of Young's Rectal Dilators. The dilator set consists of a series of four bakelite dilators, graduated in size and introduced in series as the anal sphincter becomes accustomed to dilatation. They are supplied both in adult and childrens sets. Rectal dilatation is used by surgeons post operatively after hemorrhoidectomy. They are also used to treat certain cases of constipation, rectal neurosis, uncomfortable bowel movement and other conditions which may arise due to a tight or spastic anal sphincter."

REED & CARNRICK

Jersey City, New Jersey

Booth Nos. 76, 77

Since 1860 the high ethical and scientific ideals of the Reed & Carnrich laboratories have continued to merit the confidence and support of the American medical profession.

Scientific research and rigid technical supervision assure the potency, clinical efficacy and economy of all medicidal agents bearing the name.

MAX WOCHER & SON COMPANY

Cincinnati, Ohio

Booth Nos. 78, 79

J. F. HARTZ COMPANY

Detroit, Michigan

Booth Nos. 80, 81

The J. F. Hartz Company, Detroit, will be pleased to have the opportunity of exhibiting at the International College of Surgeons, Booths 80–81.

In addition to Hartz Laboratory Controlled Pharmaceuticals, we will display physician's equipment and the latest in diagnostic and surgical instruments.

AMES COMPANY, INC.

Elkhart, Indiana

Booth No. 82

Demonstrating technics for the detection of urine-sugar, albumin and occult blood.

Clinitest is a tablet method for the detection of urine-sugar. It is a copper-reduction test which develops its own heat within the test tube.

Albutest (Albumintest) is a reliable, nonpoisonous, noncorrosive tablet method for the detection of protein (albumin). It does not require heat.

Hematest is a new, unique, tablet method for the detection of occult blood in feces, urine and other body fluids. It is a reliable procedure that can be carried out quickly by the physician, public health worker or laboratory technician.

LEA & FEBIGER

Philadelphia, Pennsylvania

Booth No. 83

At Booth 83, Lea & Febiger will exhibit among their books Babcock's Principles and Practice of Surgery, Bell on Renal Diseases, Ewerhardt & Riddle's Therapeutic Exercise, Scott and Van Wyck's Obstetrics and Gynecology, Stone & Dufault on Diagnosis and Treatment of Pulmonary Tuberculosis, Quiring's The Extremities, Soffer's Diseases of the Adrenals, Olkon's Essentials of Neuro-Psychiatry. New editions of many standard works will be shown.

BIRTCHER CORPORATION

Los Angeles, California

Booth No. 84

The famous Birtcher "Challenger" line short wave diathermy machines; the Birtcher major Electro-Surgical Unit affording tube cutting and spark-gap coagulation with the three-pedal footswitch control affording the ability to mix electrical currents; the Birtcher "Hyfrecator" for electrodesiccation-coagulation technics; a complete line of accessories for diathermy and electro-surgical devices and the Birtcher-Thorek electrode for electro-surgical obliteration of the gallbladder. Birtcher goods are distributed by authorized surgical dealers in 35 countries outside of the United States.

OHIO CHEMICAL & MFG. COMPANY

Chicago, Illinois

Booth Nos. 85, 86, 87, 88

"OHIO" will exhibit representative items of its several divisions. Heidbrink Apparatus: gas-anesthesia units, oxygen-therapy equipment, resuscitators. Scanlan Morris: explosive-proof Multibeam lights, operating tables, SterilBrite furniture, Stille instruments and sutures. Medical-gases division: anesthesia and therapeutic gases.

DOHO CHEMICAL CORPORATION

New York, New York

Booth No. 89

The Makers of "AURALGAN" are introducing at this Meeting their new sulfa drug preparation "OTOMOSAN", indicated in the treatment and control of chronic suppurative ears. Our representatives will be happy to explain, in detail, the workings of these medications.

Also to distribute our latest series of three (3) Anatomicopathologic Charts of the Ear, in color, suitable for framing.

S. J. TUTAG COMPANY

Detroit, Michigan

Booth No. 90

HOSPITAL LIQUIDS, INC.

Chicago, Illinois

Booth No. 91

WILLIAM H. RORER CO.

Philadelphia, Pennsylvania

Booth No. 92

MARK EZRA COMPANY

Detroit, Michigan

Booth No. 93

The Mark Ezra Company, Detroit, Booth 93, will feature an original and most attractive display of medical jewelry and novelties. This exhibit will be warmly welcomed by the physician and surgeon as the answer to "the perfect take home gift".

THE ALKALOL COMPANY

Booth No. 94

ALKALOL—unique alkalide, saline solution—aqueous, non-toxic, non-irritating, hypotonic, a mucus solvent.

IRRIGOL—aseptic, effective powder which makes a solution for vaginal douching, colonic irrigations, rectal enemas.

Ethically distributed through the medical profession for 50 years—since 1896.

ARMOUR LABORATORIES

Chicago, Illinois

Booth No. 95

VAN PELT & BROWN, INC.

Richmond, Virginia

Booth No. 96

GUDEBROD BROS. SILK COMPANY, INC.

New York, New York

Booth No. 97

TOWER COMPANY

Seattle, Washington

Booth Nos. 99 and 100

DETROIT FIRST AID COMPANY

Detroit, Michigan

Booth No. 101

PICKER X-RAY CORP.

New York, New York

Booth No. 102

MEDICAL SUPPLY CORPORATION OF DETROIT

Detroit, Michigan

Booth No. 103

The display of the Medical Supply Corporation of Detroit will consist of articles of interest to the surgeon.

DIETENE COMPANY

Minneapolis, Minnesota

Booth No. 104

Both Dietene's Accessory Feeding, for use in high protein diets, and Dietene Reducing Supplement will be on display, with simple, complete, easy-to-follow diets which are available to physicians.

GRUNE & STRATTON

New York, New York

Booth No. 106

BRENNER AND KEFFER

Detroit, Michigan

Booth No. 107

At the Brenner and Keffer booth will be shown artificial limbs, braces, arch supports, and a general line of Orthopedic and Surgical appliances.

MEDICAL PROTECTIVE COMPANY

Fort Wayne, Indiana

Booth No. 108

The most exacting requirements of adequate liability protection are those of the professional liability field. The Medical Protective Company, specialists in providing protection for professional men, invites you to confer, at their exhibit, with their representatives, Mr. George W. Triplett, Mr. A. G. Schulz, and Mr. Richard E. Drew. They are thoroughly trained in Professional Liability underwriting.

WILLIAMS & WILKINS

Baltimore, Maryland

Booth No. 109

WHITE LABORATORIES, INC.

Newark, New Jersey

Booth No. 110

White Laboratories, Inc., at Booth No. 110, present information regarding White's Sulfathiazole Gum—expressly formulated for topical chemotherapy in oropharyngeal infections; White's Otomide—a more effective means of topical chemotherapy in ear infections—and a NEW specialty, White's Mol-Iron Tablets, a new and definite advance in the treatment of iron deficiency anemias.

White's ethically promoted vitamin specialties are also featured. You will find a very cordial welcome by White's Medical Service Representatives in charge of the exhibit.

CAMERON SURGICAL SPECIALTY COMPANY

Chicago, Illinois

Booth No. 111

See the Cameron Electro-Surgical Units, Coagulaid-Sigmoidoscope, Electro Diagnostosets, Flexible Gastroscopes, Bronchoscopes—Esophagoscopes—Laryngoscopes, Mirrolite and Binocular Spectacle Loupe for the Fenestration Operations, Magniscope and other specialties developed for your postwar diagnosis, treatment and surgery.

TECHNICON COMPANY

New York, New York

Booth Nos. 112, 113

The AUTOTECHNICON automatically processes and stains tissues overnight for microslide mounting saving time, labor and materials. The SCOPICON mobile microslide and transparency projector employs new high-intensity mercury lightsource. Wallscreen projection or darkhood viewing with auxiliary mobile table. Also microphotography monotone or color. Lab-AID laboratory accessories and laboratory slide filing cabinets.

COMMERCIAL SOLVENTS CORP.

New York, New York

Booth No. 114

H. G. FISCHER & CO.

Detroit, Michigan

Booth No. 115

The H. G. Fischer & Company, Detroit will feature the latest in X-Ray and medical and surgical electrical equipment, Booth Nos. 78, 79. Personnel on hand to greet you will be M. C. Hunt, H. M. Berry, W. C. Elliott, J. N. Griffith, W. V. Scudder, L. H. Wolfe and Paul Garrard and L. F. Fild.

MEDICAL FILM GUILD

New York, New York

Booth No. 116 plus Cinema Room B

Medical Film Guild through their "Medical Films That Teach" presents a refresher course in fundamental medical problems. This program, during the war period kept the military medical man abreast of modern civilian procedures. These films, representing several years of research, are condensed into half hour productions, each acting as a visual text book. They review such subjects as Parkinson's Disease, the major neuralgias, cervicitis, otolaryngological diseases, contagious diseases, arterial blood pressure, hypothyroidism and industrial medicine. They are available to medical societies, medical schools and hospitals and include projection service at no charge through grants for post-graduate instruction.

V. MUELLER COMPANY

Chicago, Illinois

Booth Nos. 117 and 118

HACK SHOE COMPANY

Detroit, Michigan

Booth No. 119

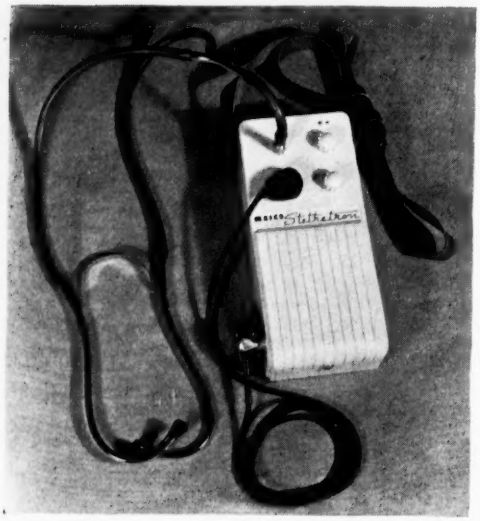
Surgeons, too, occasionally suffer from foot strain and HACK SHOES, in several distinguished patterns offer the comfort of HACK'S patented TRIBALANCE stabilizing support.

Why not be fitted while at the Convention? Subsequent mail orders can be made from the complete record which will be made at the time of your fitting. Located on the 5th floor of the Stroh Bldg. at 28 Adams West.

MAICO COMPANY, INC.

Minneapolis, Minnesota

Booth Nos. 120, 121



The Maico Company will feature Audiometers, Hearing Instruments, and the Stethetron, a new electronic stethoscope. L. A. Watson, president of the company, and Troy Grady, Detroit distributing technician, will demonstrate the equipment and answer questions. Physicians and Surgeons will be particularly interested in the Stethetron which permits selective amplification of important body sounds while subduing other sounds to convenient comparison levels.

CAMERON HEARTOMETER COMPANY

Chicago, Illinois

Booth No. 122

See the improved Heartometer, a scientific precision instrument for accurately recording systolic and diastolic blood pressures. It also furnishes a permanent graphic record of the pulse rate, the nervous functioning of the heart, the myocardial response, as well as the functioning of the valves. The Heartometer clearly reveals heart disturbances in both early and advanced stages and is of great value in checking the progress of medication and treatments.

CANADIAN RADIUM AND URANIUM CORPORATION

New York, New York

Booth No. 123

High-purity Radium is available to the medical profession in any form and any type of container. A special exhibit is devoted to Alpha-Ray Therapy by the utilization of Radon in ointment. For further interesting details, call at Booth No. 123.

DAVIS & GECK, INC.

Brooklyn, New York

Booth No. 124 and Cinema Room A

Davis & Geck, Inc., manufacturer of surgical sutures exclusively, will display a line of sutures and suture-needle combinations applicable to every surgical situation. These will consist of D&G Thermo-flex and Claustro-Thermal catgut as well as non-absorbable sutures including D&G Dermalon, Surgilon, Anacap silk, Surgaloy metallic sutures and others. Motion pictures from the Surgical Film Library will be shown in Cinema Room A. Several new subjects will be presented. The company will be represented by Mr. Fred Geck.

THE UNIVERSITY PRESSES

Chicago, Illinois

Booth No. 125

The exhibiting of BOOKS FROM UNIVERSITY PRESSES is an out-growth of the American Association of University Presses. Each press represented is a separate publishing company devoted to the production of important technical and scholarly works which might otherwise go unpublished, as well as general books of vital interest and importance to all Americans. Because of their common goals, and because some of them are too small to sponsor exhibits alone, these presses have combined to present their books in a single group.

G. A. INGRAM COMPANY

Detroit, Michigan

Booth No. 131

STILLE INSTRUMENTS will be displayed at the exhibit of the G. A. Ingram Company, as well as other new and approved items.

(The above list is as complete and accurate as it was possible to make it at the time of going to press.)

BE SURE TO VISIT EVERY BOOTH

There is much that is new and interesting.

To our business friends in the Technical Exhibit, the United States Chapter, International College of Surgeons, expresses sincere thanks for their splendid co-operation and very tangible contribution to the expected success of the 1946 Assembly.

News Notes

Dr. Rudolf Nissen, of New York, has been offered the Chair of Surgery at the University of Hamburg, Germany. Dr. Nissen was formerly Associate Professor of Surgery at the University of Berlin, also Professor and Head of the Department of Surgery at the University of Istanbul, Turkey. At the present time, he is Senior Surgeon at the West Side Hospital and Dispensary in New York City, and Attending Surgeon at the Brooklyn Jewish Hospital, Brooklyn, New York.

The National Gastroenterological Association has announced the winner of its 1946 Cash Prize Award Contest for the best unpublished manuscript on Gastroenterology or an allied subject.

The winning contestant was Capt. Irving B. Brick, M.C., A.U.S., whose paper on "Radiation Effects on the Human Stomach: A Preliminary Report" was selected by the judges. The check for $100.00 was presented to Capt. Brick at the Annual Banquet of the Association held at the Hotel Pennsylvania on Thursday evening, June 20, 1946. The presentation was made by C. J. Tidmarsh, M.D., First Vice-president of the National Gastroenterological Association.

Certificates of Merit were also awarded to Frank L. Apperly, M.D., Richmond, Va.; William Nimeh, M.D., México City, México, and Juan Nasio, M.D., Rosario, Argentina.

The winning paper, as well as those receiving Certificates of Merit, will be published in the Review of Gastroenterology commencing with the September–October 1946 issue.

News from South America: Peru: The Peruvian Academy of Surgery gave a testimonial celebration to Prof. Francisco Graña, F.I.C.S. (Hon.), upon the occasion of his election as President of the International College of Surgeons. This ceremony was carried out in two parts: the first, of a clinical nature, was held in the Hospital Obrero of Lima; the second, in the Academy proper, was presided over by the Minister of Public Health and Social Aid of the Republic, Dr. Julio Ernesto Portugal, F.I.C.S. (H.C.). The clinical portion of the program was tendered by the Superintendent of the hospital, Dr. Guillermo Almenara, and consisted of surgical presentations by distinguished hospital colleagues. At the Academy, testimonials were offered by the President of the institution, Dr. Francisco Villa Garcia, F.I.C.S., Prof. Fortunato Quesada, F.I.C.S. (in the name of the Academy of Medicine), Dr. Carlos Alberto Protzel, F.I.C.S., (in the name of the Dos de Mayo Hospital) and Dr. José Vález Díez Canseco, F.I.C.S. (in the name of the Hospital Obrero). Dr. Graña responded with a most eloquent speech of appreciation. The affair was closed with some effective words by the chairman, Dr. Portugal.

The Peruvian Academy of Surgery also gave a testimonial celebration in honor of Prof. Dr. Miguel G. Aljovin, F.I.C.S. (Hon.). This affair also took place in Lima.

Argentina: The distinguished surgeon, Prof. Dr. Oscar Ivanissevich, F.I.C.S., has just been appointed Argentinian Ambassador to the United States.

Venezuela: Word has just been received of the recent death of Prof. Dr. Antonio J. Castillo, F.I.C.S. (Hon.), Rector of the Central University. His death occurred but a few days after his twenty-fifth professional anniversary.

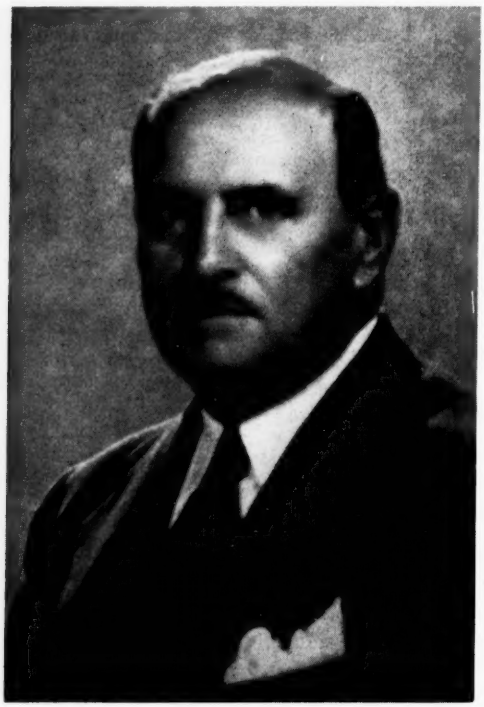
Mexico: Prof. Dr. Gonzalo Castañeda, F.I.C.S. (Hon.), president of the Mexican chapter of the College, has recently published a new book entitled, "Ideario Clinico."

Drs. Héctor Ramírez de Arellano, F.I.C.S., and Mario Vergara Soto, M.I.C.S., have recently been elected to the Mexican Academy of Surgery. Other members of our College also elected to the same body include Prof. Dr. Ugo Pinheiro Guimarães of Rio de Janeiro, Brazil; Prof. Dr. Antonio Rodríguez Díaz of Havana, Cuba, and Prof. Dr. Domingo Prat of Montevideo, Uruguay; each of these distinguished colleagues has been chosen to act as Corresponding Foreign Academician.

THE FIFTH INTERNATIONAL ASSEMBLY
of the
INTERNATIONAL COLLEGE OF SURGEONS
Lima, Peru. March 24–27, 1946

Opening Session

At the invitation of the Peruvian Government, the Fifth International Assembly of the International College of Surgeons was held in Lima, Peru. The Assembly was under the general chairmanship of Dr. Francisco Graña, President-Elect of the College, Peruvian surgeon of note and presently serving as President of the National Academy of Medicine. Under his direction and with the assistance of the Peruvian Academy of Surgery, the program of the meeting was excellent and the Assembly a brilliant success.



Prof. Dr. Francisco Graña, President-Elect, International College of Surgeons.

The hospitality of the Peruvian Government and of the city officials of Lima and the coöperation of the Peruvian scientific societies together were responsible for the outstanding success which the Assembly proved to be.

La Reforma Medica praised the devotion of the organizers of this Assembly and expressed to Dr. Graña its sincere congratulations for the honor he had received through his election to the status of President-elect of the College for the present term.

The inaugural session, on Sunday the 24th of March, at 7 P.M., in the Municipal Theatre of Lima, was presided over by the President of the Republic, Dr. José Luis Bustamente y Rivero, Benefactor, Honoris Causa of the College, with the assistance of the Ministers, the Diplomatic Corps, the Rector and Deans of the Greater University of San Marcos and the presidents of the Academies and Medical Societies. On this occasion, addresses were delivered by the general chairman, Dr. Francisco Graña; the President of the Peruvian Academy of Surgery, Dr. Flipe A. de la Torre; and the International Secretary-General, Dr. Max Thorek. Greetings from the Presidents of the delegations in the names of their respective governments were read. At the conclusion of this session, the President of the Republic declared the Fifth International Assembly of the International College of Surgeons to be officially open.

On Monday the 25th, the Assembly met from 9:20 A.M. to 12:30 P.M. and from 3 to 7 P.M. in the auditorium of the Hospital Obrero of Lima when scientific papers were read. Surgical operations were performed by local surgeons and delegates from 8 to 10 A.M., in a number of hospitals designated for this purpose. Special cinematographic demonstrations of surgical procedures were displayed at the Hospital Obrero also.

On Tuesday the 26th, the Assembly met again at the same place and hours as on Monday, when further scientific papers were read.

On Wednesday the 27th, the scientific session was limited to the morning hours and was presided over by the President of the Peruvian Academy of Surgery. At this session, the work of national surgeons was presented. The final gathering was held in the afternoon of that day, in the auditorium of the Hospital Obrero and was presided over by the Minister of Public Safety, Dr. Julio Ernesto Portugal, Member, Honoris Causa of the institution.

An address was presented by the President of the College, Dr. Albert A. Berg. The address of the Minister was responded to by a delegate chosen for this purpose by the foreign delegations.

At 9:30 P.M. a banquet was tendered by the Peruvian Surgical Academy, in honor of the foreign delegates. The presidents of the Academies of Medicine and of Surgery, of the Peruvian Academy of Stomatology, as well as the Secretary-General of the Medical Association, Daniel A. Carrion, and others were the speakers. These addresses were responded to by delegates selected from the foreign delegations.

On Thursday the 28th, at 9 A.M., the delegates visited the Anthropological Museum of the Magdalena. Dr. Julio C. Tello, Director of the Museum, demonstrated and explained Peruvian archæology. At 5 P.M., the same day, the President of the Republic held a special audience for the delegates and their families; and from 7 to 9 P.M., the President of the Council of Ministers and the Minister of Public Health and Social Aid tendered a reception in the Palace of Torre Tagle, in the name of the government.

On Friday the 29th, the Mayor of the Municipality of Lima gave a reception for the delegates and their families in the Municipal Palace, from 7 to 9 o'clock in the evening.

The Solemn Inaugural Session was held at the Municipal Theatre. The stage was decorated with the national flags of all the countries having delegates participating in the Assembly. The solemn ceremonies opened at 7 P.M. under the Presidency of Dr. Portugal, assisted by Drs. Graña, de la Torre, Thorek; also Drs. Fortunato Quesada, Director of Military Health, Lizardo Alzamera, Dean of the Faculty of Law (representing the Rector of the University of San Marcos), Carlos Monge and other notables. Guests of honor were the President of the Republic, the Mayor and Councilmen of Lima, members of the Diplomatic Corps, political leaders, the clergy and other socially prominent persons. A large number of surgeons filled the body of the theatre. The addresses delivered upon this occasion follow.

Dr. Manuel A. Manzañilla, F.I.C.S. (Hon.), México, D.F., México; Vice-President of the International College of Surgeons.

(Address of Dr. Francisco Graña.)

"Mr. President of the Republic and Gentlemen:

"The solemnity of this ceremony, whose culminating interest stems from its international and scientific character, is enhanced by the presence of

the President of the Republic, the Ministers of State, the Rector and Deans of the Faculties of our illustrious University of San Marcos, members of the Diplomatic Corps, Presidents of our Academies and medical associations, teachers, investigators, students, who nourish, we are sure, in these hours so serious and extremely disquieting to all humanity a sincere faith in the efficacy of science and in the applications of solidarity in the great work of world reconstruction. And it is fitting to recognize in this convocation of the International College of Surgeons and the Peruvian Academy of Surgery, a new and vital force in the exaltation of these supreme values which constitute the fundamental bases of human culture.

"Even in the most remote legends of primitive civilizations are found the purposes realized by man, originally wrapped in myths and superstitions, to interpret the significance of the natural elements, the cardinal facts of existence, the origin and object of life, the causes of death and their relationship to the great sidereal phenomena; forces which represent in reality the first vestiges of the physical and biological sciences.

"And in the course of time, across the infinite forms of social organization adopted for humanity, were born the hypotheses, the theories, the means of exploration and judgment, the scientific methods, finally, which developed slowly and progressively, were scattered and purified, thanks to the efforts of generation after generation, which, passing over all the roads which lead to the exploration of the unknown, discovered unsuspected horizons for each stage of human knowledge. The culmination of this prodigious evolutionary process, which is the sum of the experience of a thousand centuries, will be represented by these systems of truth, each time closer to the immutable and perfect, which constitute the gigantic structure of contemporary universal science.

"In reality, science presides over or participates in, all of the aspects of human life, not only in those which specifically constitute the patrimony, physical, material and biological, but in all the others, of social, pedagogical or juridical character; and in the arduous tasks of government from which stem, then, the vital principle of the organization, the severity and justice of criticism, the valuable precepts of method, the revelation of general principles and those of comprehension and equity, capable of balancing or correcting the perpetual antagonisms of collective life.

"Such high functions are in harmony with the correctness of the procedures, where exactitude reigns supreme with its essential mission which is to find the truth, the infallible anticipator of good and justice.

"But in the eternal succession of antimotic periods which compose human history, those of peace, in reality preparatory for aggression or defense, and those of violence or extermination, science follows an unmistakable path of admirable technical progress, whose explanation, nevertheless, is profoundly and grievously contradictory. Before a serene and objective judgment, it appears, rather, that its cultivators sharpen the inventive faculty and devote more pains to discovering the agents of pain and death, than those capable of obtaining the well-being and happiness of men.

"And we make these deductions from a field of science which shows an untarnished history. Medicine, which is one of the heroic professions, has given itself always, wholly, to protection of life and alleviation of men's pain, in the midst of the greatest calamities of history.

"The great tragedy, which still devastates the world, is based precisely on the use of science for destructive purposes and which is not explained by an obstinate denial of itself or the incessant ardor for destroying whatever is noble, useful and beautiful, created and perfected itself only by the persistence of traditional errors and the lamentable lack of general culture of the people.

"So, men as well as scientific institutions have been led by or are dependent on official organizations, which alone provide the means of action, but which do not grant them the determination of boundaries. On the other hand, science is still the patrimony of the very few, not in regard to investigation and study, which must correspond to compact, select groups, but in regard to its utilization by the majority of men of all those benefits which have an experimental, useful and logical base.

"The modification of such circumstances implies, then, renewing determined bases of social and governmental organization still in operation, and giving new impetus to the teaching and spread of science, of whose beneficent application to the great human necessities only scientifically educated peoples may enjoy the advantage. Others will not be easily and immediately conquered, but if present generations do not wish to march backwards to their own destiny, they will have to follow it with the most intrepid eagerness.

"During the past century there have operated in the world more profound changes than at any other epoch in history, and it is well appreciated that on all of them is imposed a common character, which is universality. Distances virtually do not exist. All the events of the world occur simultaneously and with solidarity. Scarcely a hundred years ago the village, the city, the nation constituted an autonomous unit; today the unit is the world. And this progressive movement is paralleled by the amplification of solidarity, which formerly demanded the cohesion of a town, later a group of towns, and today tries to include all the towns of a land.

"There is no necessity more peremptory and urgent than this harmony, and this conjunction of ideals, whose object is not to equalize all men, but to provoke a just and stable equilibrium, since heterogeneity and hierarchies obey immutable biological laws, springing from a difference in aptitudes and human tendencies. Differences essential, moreover, to the fulfilment of the multiple and essential functions of social life. The only equality, beginning and end of all jointly liable movement, is equality before Law and Justice. But it is not enough to scatter, in passing, on the minds of men, ideas, advice and admonition; the use of will and the example of action are necessary, because even the most wholesome and useful principles only become rooted in the majority of men when they are profoundly understood and loved.

"The celebration of this Assembly of the International College of Surgeons and the First Peruvian Surgical Conference, which will signalize a brilliant epoch in the life of these institutions, has that significance, a living and fecund lesson, to which contribute with their zest and abnegation, men of science, masters, investigators, visitors from numerous

countries, who, united to us, bind themselves to unify knowledge, practices, technics for which, scattered through the world, they best fulfill the holy work of protecting the health and life of mankind.

"And the moment is ripe for it because, on the ruins left by the great crises of history are always raised the revivifying and optimistic structures of renewal and progress.

"We have faith in the outcome. We hope that Science, whose stage is the world, will have no other destiny than the search for truth; that justice and solidarity penetrate ever deeper into the hearts of men, that the observance of an elevated moral illumines its steps, in order that they may fulfil their principal end of common good, heedful, above all, of the Supreme Judgment of God."

(Applause.)

(The address of Dr. Felipe A. de la Torre, President of the Peruvian Academy of Surgery follows.)

"Mr. President of the Republic:

"It is a signal honor for me to address this magnificent assembly, which acquires all its prestige and brilliance from the quality of the persons who give it lustre by honoring us with their presence. My modesty is impaired as I address you, scientific authorities of the countries of all the continents and of my fatherland, who are united in our city to celebrate the Fifth Assembly of the International College of Surgeons. I salute you in the name of the Peruvian Academy of Surgery, because on this occasion, with the gift of your presence and the formidable burden of knowledge which you bring, will be treated the problems of the surgical specialty in our First Peruvian Conference on Surgery.

"There is not, surely, among the positive principles which link men to society, any which, like coöperation, raises such distant margins of human hope toward a better world. It strengthens and solidifies the chains of chance, or creates new ones, or opens the way so that collective or multiple force may be transformed into beneficence. For this reason, coöperation becomes universal. Any politics, pure technic, science and investigation proclaim it. For this reason, it acquires day by day its moral tone, with profound roots in sociology, because coöperation must be a rule for all men of all sectors of the social order; to coöperate to dignify life and its functions, to set the course toward success, to defend it from destruction and ruin, or to coöperate, finally, to affirm it in the loftiest proposals or for the purest ends of eternal salvation. All this demands unity of effort in order that the decisions of the will may be efficacious. To coöperate each time more closely to unify and strengthen the multiple forces, and bring it about that the destiny of each human group in its own national order, or that of each national group in the vast scope of entire humanity may be one, illustrious, and good.

"The isolation of men and of nations now has its origin lost in distant and obscure phases of history. Men in the modern world cannot exist alone; they are thinking with great intensity of marshaling their forces to obtain results in an ever-greater volume and of finer quality. There is now practically no activity which escapes this inevitable gravitation, and in the order of scientific coöperation we have had ours, the undeniable superiority of having registered through our international contacts, no opposition of interests, but of logical counter-positions, given that scientific effort always has universal consequences. The true, sane, scientific vocation is totally removed, or ought to be, from the false tinsel of vanity. This is the principle which has guided international meetings of a scientific character. So distant from daily turmoil, the works of men of science often serve only as simple information for Assemblies. Conclusions live only in the world of theories. The contacts of these Congresses, our own international contacts, are work sessions of technics patiently evolved in order that their excellence may be judged, not only for the technic, but also for the creative genius which is so far apart from the mechanical means, in order to apply to the scientific action its proper concept.

"And here, gentlemen, is action realized in spite of the inconveniences of the distances which separate our peoples. This is the action of scientific congresses, which unite us materially and transitorially, but leave us in the pursuit of professional life a dowery of incomparable richness, and, who knows? perhaps some new element of psychological character for our capital of scientific will. This great work of scientific coöperation is of first rank; we must give recognition to medical science, because we are far from thinking that scientific knowledge of materia medica has reached incontrovertible levels. To so state would be equivalent to inacceptable evidence. It would be harmful and inconvenient for the proper unfolding of our science. It would be equal to paralyzing all effort. It is timely, since this is a common meeting place, to declare that medical science for its increasing excellence needs this perennial restlessness which constitutes the fundamental basis of success and triumph.

"Today Peru has the honor of giving us the necessary shelter, so that as men of science we may have a corner of the world where we may concentrate the flight of our scientific thought. It is a signal honor and a satisfaction of our hospitality to lavish warmth and friendship to make your presence a happy one, to answer once more the call of our feelings of fraternity, in order to permit us to think over carefully and responsibly whatever pertains to health and the life dependent on our hands. We leave you the necessary silence. We shall not place any hindrance to your task; neither talk which would harm you, nor question as to the presumption and ability which make you undertake the visit. This is your home. Here are peace and the faith necessary to mediate freely. The problems of the hour have the gravity of all urgent matters. Modern life is dynamic and active, but it is also grievously influenced by certain events. War has left its residue of confusion in all spirits. It has opened doors to the violence of men, but surely has left others half open to permit human genius to be liable to the risk of its own annihilation. Science, in the midst of all this negative spectacle, is enriched, nevertheless, because science represents the reaction of the life of humanity which does not wish to disappear. So that, in the midst of negation and battle, medical science has enormously enriched its annals, serving in the midst of clamor to lessen pain or to remake and save the precious element that is human life.

"All this, because our professional solidarity is really a gift which we make to human society;

it is one more hope for those who suffer pain in their own flesh. It is an aid for those who believe in the necessity of affirming the security of the health and progress of human kind. And if it is a question of peace, our science ought to be enriched further to ensure that the home continue, society be tranquilized and freely separated from dangerous nostalgias or from the toils of death. For this reason our reunion in this solemn Fifth Assembly of the International College of Surgeons must synthesize points of view from other latitudes and ours in the common engagement of the fight against evil.

"I must express to the illustrious colleagues who honor us with this visit, in the name of the Peruvian Academy of Surgery, its gratitude for the contribution of their presence in lending prestige to the First Peruvian Surgical Conference. Fate has willed that this conference on Peruvian problems and surgical works may increase the volume of intelligence ensured by your presence; for this accept my word of personal gratitude, as well as for the fact that with such promising auspices, and enlightened scientific aid, the First Peruvian Congress of Surgery can be no less than a complete success.

"We unite our activities because a universal consciousness of good joins our wills, superior to one, in one religion in an hour so momentous for humanity, and in a moment as moving as this; let us so strive, that by a common effort, with a conquering spirit, with unshakable faith in the great destinies of humanity, raising our hearts above human miseries, let us work for the well-being of all the inhabitants of the earth." *(Applause.)*

Professor Graña then read the communication of Professor Nissen in Spanish:

Senor Presidente: y delegados a la quinta asamblea Internacional del Colegio Internacional de Cirujanos. Hay dos emociones que conservo hasta este dia de la sección de apertura de la casa de delegados del Colegio Internacional de Cirujanos: Una es de alegria y la otra de pena. Siento que no he estado en el destino el poder estar con Uds. en esta hora de actividad y regocigo por causa de impedimentos invencibles que impide mi asistencia. Me alegro porque esta asamblea tiene lugar en su bello país y marca un punto brillante en el constante exito ascendiente del colegio. Sirvanse aceptar mis sinceras felicitaciones y profundos deseos para su exito lo cual seria mas agradable para mi presentarselo en persona si fuera posible.

La historia del colegio el cual he observado desde sus principios con placer y alegria hasta su presente desarrollo, es la pruebe mas incontravertible que una noble idea basada en la verdad y valor siempre tendrá éxito a pesar de todos los impedimentos y vituperaciones. "La verdad impone su victoria sobre todas las cosas." No es necesario afirmar que el colegio tiene una dueda profunda con su brillante presidente el Professor Doctor Francisco Graña y con los colegas que le ayudaron a hacer de esta asamblea el exito que seguramente va tener. Apreciamos en todo su valor el sacrificio personal de los fieles y abnegados socios del colegio quienes sin consideracion de tiempo distancia y clima, han reunido sus esfuerzos para que esta reunion culmine en el éxito. Siempre tendremos en cuenta que nuestra organizacion basada en ideales humanitarias conseguira inculcar en cada uno de los constituyentes el ideal comun hacia que todos luchamos.

Nunca hubo tiempo alguno en la historia del esfuerzo humano en que la comprension internacional en todas las etapas de la vida sea tan importante y tan esencial como en nuestros dias. Los antecedentes de esta terible guerra que todos hemos vivido, nos ha traido a la realizacion de los defectos de nuestra vida internacional. Hablando con mas claridad ha mostrado las tendencias criminales y las injusticias del hombre para con el hombre Y bajo la cabeza avergonzada de colegas nuestros que han suscrito su nombre a practicas tan nefarias en algunas partes del mundo llamado civilizado.

No veo ideal mejor para el cumplimiento de una paz permanente, que cualquier organización internacional pueda buscar, que la organización que cultiva alimenta y desarrolla entre sus mienbros el amor de la humanidad, y por la misma razón expone y detesta aquellos que se han apartado de le senda del la justicia y deliberadamente violado la ley del respecto del hombre y su prerrogativas divinas "la libertad de practicar las actividades eticas, o que en conspiracion con otros deshonra y humilla a los hombres y que directa o inderectamente suscribe y ayuda los conceptos barbaros de conquista y degradacion vergonzosa." Recordemos pues en esta organizacion el colegio internacional de cirujanos, que tratamos de hacernos grandes y dignos de nuestra mision.

Relativo mi informe sobre las actividades Europeas, quiero reportar "Progreso." He estado en correspondencia con muchos de los sobresalientes cirujanos en el Continente Europeo durante esta tragedia mundial; y manteniendo nuestras ideales en el pensamiento, he labrado solamente con ellos que han suscrito a los principios del Colegia. Espero hacer un vije a Europa en los intereses del Colegio durante del mes de Julio y trataré de empeñarme en su nombre. Al cumplirlo, someteré mi informe a la Junta Directiva; pero, mientrastanto, como en el pasado, Uds. pueden estar seguros que haré todo lo posible para procurar lo que es justo, derecho y honrado en nuestra profeción.

An English translation of Prof. Nissen's message follows:

Mr. President and Delegates to the Fifth International Assembly of the International College of Surgeons:

There are two emotions which I preserve on this day of the Opening Session of the House of Delegates of the International College of Surgeons: one of joy and one of sorrow. I am sorry that it has not been willed that I be with you in this hour of activity and rejoicing because of impediments which prevented my attendance. I am joyful because of this Assembly in your beautiful country, which marks a brilliant milestone on the constant ascent of the College to achievement. Please accept my sincere congratulations and profound good wishes for success, which I would be happier to extend to you in person if it were at all possible.

The history of our College, which it has been my pleasure and joy to observe from its very beginning to its present worthy state of development, stands as incontrovertible proof that a noble idea will *always* succeed, regardless of hindrances and vituperations.

It is needless to state that the College is much

indebted to its splendid Chairman, Prof. Dr. Francisco Graña, and to all the colleagues who aided him in making this Assembly the success which it promises to be. We are fully appreciative of the personal sacrifices, of the devoted Fellows of the College who, regardless of time, distance and clime, have pooled their endeavors for a successful culmination of this gathering. We shall ever keep in mind that our organization, which is built on humanitarian ideals, will strive to inculcate into every one of its constituents the common ideals for which we are all striving.

At no time in the history of human endeavor was international understanding in *all walks of life* so important and so essential as in our own times. The antecedents of this terrific war just lived through by all of us have brought into sharp focus the defects of our international life. To be more specific, it has shown the degrading tendencies and injustices of men toward men.

I can see no better ideal for the achievement of a lasting peace that any international organization may strive for than that organization which cultivates, nurtures and develops among its constituents the love for humanity and by the same token exposes and detests those who have strayed from the paths of righteousness.

As to my report on European activities, I report "Progress." I have been in communication with many surgeons on the European continent during this world tragedy; and I have, keeping our ideals in mind, cultivated only those who subscribe to the principles of the College. I am planning a tour of Europe in the interests of the College in the near future, and I shall exert every influence in its just behalf. I will then submit my report to the Board of Trustees; but meanwhile, as in the past, you may rest assured I will continue to strive for what is just, right, and honorable in our profession.

(Dr. Max Thorek, International Secretary-General of the College, spoke in Spanish. His address follows.)

Excmo. Señor Presidente de la República
Señores Ministros de Estado
Honorable Cuerpo Diplomático
Rector de la muy Lustre Universidad Nacional de San Marcos
Presidentes de las Academias de Cirugia, Medicina y Estomatología y Sociedades científicas
Oficiales, Delegados, y Miembros de la Asamblea del Colegio Internacional de Cirujanos; Señoras y Señores:

La medicina, protectora de la humanidad, habiendo sobrevivido la última gran guerra, está luchando por sobrevivir en la paz beligerante. La colaboración médica entre las naciones unidas era tan esencial para fortificar nuestra defensa contra la enfermedad, como lo era para ganar el dominio sobre el enemigo común. Queremos decir por supervivencia la continuación de las labores científicas en la profesión médica, sobre la cual se basa nuestra tarea de conseguir los abras humanitarias, estableciendo un porvenir nacional, como depende la estrategia militar de las armas y municiones para alcanzar el triunfo definitivo. Con el tiempo, de este porvenir nacional, nacerá una concienciа internacional en lo que se refiere a las relaciones de interdependencia *mutua*.

Prof. Felipe Carranza addressing the Assembly at the inaugural session of the International College of Surgeons, in the Municipal Theatre, Lima, Peru.

Así que, esta primera asamblea de la post guerra del Colegio Internacional de Cirujanos señala una época. Además, la asamblea se reune en el país de una de las civilizaciones más *antiguas*, los Incas. Con ellos tenemos una deuda eterna por habernos legado algunos de los procedimientos quirúrgicos y medicinales ahora usados comunmente. Celebramos también esta nueva época como la más grande que la medicina, la cirugía y las ciencias afines han conocido. En estos últimos cinco años la ciencia ha hecho enormes progresos.

La mano que cura la mente y el cuerpo de los hombres debe también, por la misma razón, restaurar la concienciа económica, social y política del mundo. Por esta razón, la obra del Colegio Internacional de Cirujanos se presente con gran importancia. Como las artes, y frecuentemente los errores humanos, la ciencia no tiene sexo, raza ni fronteras territoriales. Es internacional y completamente intercósmica. Hoy en día, estamos unidos por lazos de hospitalidad y propósitos con nuestra hospitalaria República del Perú. Pero nuestros lazos van más lejos históricamente, puesto que uno de los hombres en la lucha por la independencia de este gran país fué Americano, Paul Jeramiah, que sirvió de agente a O'Higgins en los movimientos secretos en mil ocho-cientos diez y nueve. En el Perú de los Incas, donde la civilización *alcanzó* el más alta grado, la medicina llegó también a su más alto desarrollo. En la cirugía, la reducción de fracturas, la circuncisión, la sangrias, la reducción de dislocaciones, las amputaciones y el uso de suturas eran bien conocidas; el más alto desarrolo quirúrgico consistía en las famosas trepanaciones. Además, el Perú estuvo a la cabeza de Sud-América en el establecimiento de hospitales, el primero el de San Bartolomé, fundado en mil quinientos cuarenta y ocho. El Padre Padilla, en mil seis cientos cuarenta y seis, fundó el primer hospital para negros. *Terapéuticamente*, estamos eternamente agradecidos a los Incas por el uso de la quina. No debemos olvidar tampoco que fué en el Perú, donde la Cruz Roja tuvo su primer impulso en estas tierras.

Con tal tradición no nos *sorprende* que el Perú haya invitado al Colegio Internacional de Cirujanos, para reunirse en esta su bella y culta Capital. Nosotros, los miembros de la asamblea y nuestros hospitalarios amigos, debemos recordar que los que hacen el juramente de Hipócrates y siguen lospasos de Esculapio, llevan la carga de la hermandad humana doblemente impresa en el alma.

"La science n'a pas de patrie," es lo que nos hace hermanos por el mundo entero. Por eso esperamos con ansiedad los aspectos finales de la paz planeada en la conferencia de San Francisco, no sólo la paz en el frente de batala, sino la paz en el frente de la salubridad pública. Depende de nosotros, los socios de esta verdadera asamblea internacional, cimentar la paz por la que nuestros hermanos y nuestros hijos han *luchado* tan duramente. No debemos decepcionarlos.

Naturalmente, la carga cae más pesadamente sobre los que enseñan y *practican* las ciencias médicas. Porque han de servir a un mundo *caótico*, que sufre los dolores gloriosos de la maternidad. Nada puede salvar al mundo sino el *nacimiento* de la criatura mas fuerte que llevado en si la *hermandad* del hombre. Recordamos, sin embargo, que los años de la infancia son días de crisis. El niño necesita el cariño y el cuidado tanto como el alimento del cuerpo y el abrigo. Si esta criatura ha de vivir y prosperar, ha de ser apreciada en el corazón de todos los hombres, y por este aprecio todos los hombres se encontrarán revitalizados.

Se ha dicho que el corazón humano es como la piedra del molino; cuando se pone trigo debajo, da vueltas y muele y tritura el grano hasta que se hace la harina. Si no se pone trigo, la rueda continúa moliendo, pero se muele a si misma y se desgasta lentamente. Esto es precisamente lo que las naciones del mundo han estado haciendo con sus luchas eternas y su rechazo de la hermandad, destruyendo el grano del espíritu. Han olvidado poner el trigo en el corázón humano, y este olvido ha *causado* que el corazón del mundo se desgaste solo.

Por consiguiente, si hemos de cumplir con las doctrinas de la paz y la hermandad del hombre, nuestro deber no sólo es nacer nuestra criatura, sino alimentarla, guiarla y enseñarle los caminos de la paz, la unidad y la fraternidad humanas.

(A translation of Dr. Thorek's address follows.)

"Your Excellency, the President of the Republic;
"Ministers of State;
"Honorable Members of the Diplomatic Corps;
"Rector of the very illustrious National University of San Marcos;
"Presidents of the Academies of Surgery, Medicine, and Stomatology, and scientific societies;
"Officials, Delegates and Members of the Assembly of the International College of Surgeons:
"Ladies and Gentlemen:

"Medicine, protectress of humanity, having survived in the last great war, is fighting to survive in a belligerent peace. Medical collaboration among the United Nations was as essential to fortify our defense against infirmity as it was to gain dominion over the common enemy. By 'survival' we mean the continuation of scientific works in the medical profession on which are based our task of accomplishing humanitarian efforts establishing a national future, as military strategy depends on arms and munitions to achieve the definitive triumph. With time, from this national future will be born an international conference insofar as it is a question of mutually independent relations.

"Thus this first post-war Assembly of the International College of Surgeons signals an epoch. Besides, the Assembly is meeting in the country of one of the oldest civilizations, that of the Incas. To them we owe an eternal debt for having bequeathed us some of the surgical and medical procedures now in common use. We also celebrate this new epoch as the greatest which medicine, surgery and related sciences have known. In this last five years, science has made enormous progress.

"The hand which cures the mind and body of men must also, for the same reason, restore the economic, social and political conscience of the world. For this reason the work of the International College of Surgeons is of great importance. Like the arts, science has no sex, race or territorial frontiers. It is international and entirely intercosmic. Today we are united by bonds of hospitality and purposes with our host, the Republic of Peru. But our ties go further historically, since one of the men in the battle for the independence of this great country was an American, Paul Jeremiah, who served as an agent to O'Higgins in the secret movements in 1819. In the Peru of the Incas, where civilization reached its highest point, medicine also attained its highest development. In surgery, the reduction of fractures, circumcision, blood-lettings, the reduction of dislocations, amputations, and the use of sutures were well known; the highest surgical development consisted in the famous trephinations. Besides, Peru was in the lead in South America in the establishment of hospitals, the first that of San Bartoleme, founded in 1548. Father Padilla, in 1646, founded the first hospital for Negroes. Therapeutically, we are eternally grateful to the Incas for the use of quinine. We ought not to forget either that it was in Peru that the Red Cross had its first impulse in these lands.

"With such a tradition it does not surprise us that Peru has invited the International College of Surgeons to meet in this beautiful and cultured capital. We, the members of the Assembly, and our hospitable friends must remember that those who took the oath of Hippocrates and follow in the steps of Aesculapius carry the burden of human brotherhood doubly imprinted on the soul.

"'Science has no country,' is the fact that makes us brothers with the entire world. For this reason, we are anxiously awaiting the final aspects of the peace planned at the San Francisco Conference, not only peace on the battle front, but peace on the front of public health. It depends on us, the allies of this true International Assembly, to cement the peace for which our brothers and sons have fought so vigorously. We must not betray them.

"Naturally, the charge weighs more heavily on those who teach and practice the medical sciences. Because they must serve a chaotic world, which suffers the glorious pains of maternity. Nothing can save the world but the birth of the strongest creature which bears in itself the brotherhood of man. We remember, moreover, that the years of infancy are days of crisis. A child needs affection and care as much as bodily nourishment and shelter. If this creature is to live and prosper, it must be cherished in the hearts of all men, and by cherishing it, all men will find themselves revitalized.

"It has been said that the human heart is like the miller's stone; when wheat is placed beneath, it turns and pulverizes and crushes the grain until flour is made. If no wheat is placed on it, the wheel continues grinding, but it crushes itself and is slowly eaten away. This is precisely what the

nations of the world have been doing with their eternal battles and their rejection of brotherhood—destroying the grain of the spirit. They have forgotten to place wheat in the human heart; this forgetfulness has caused the heart of the world to be slowly eaten away.

"Consequently, if we are to fulfill the doctrines of peace and brotherhood of man, our duty not only is to cause the creature to be born, but to nourish it, guide it and teach it the ways of peace, unity and human fraternity."

Versión del discurso (improvisación) del Dr. Manuel A. Manzañilla, Vicepresidente del Colegio Internacional de Cirujanos, en la solemne ceremonia inaugural de la V Asamblea Internacional en Lima, Perú, 1946.

Excelentísimo señor Presidente de la República; ilustres Representantes gubernativos, diplomáticos, universitarios y científicos; señores Presidentes del Colegio, la Academia de Cirugía y la Asamblea; distinguidos colegas, señoras y señores:

En nombre de la delegación mexicana tengo el honor de expresar, complacido, nuestra adhesión a la noble labor de esta Asamblea, manifestación brillante de inquietud científica internacional, esencialmente interamericana en el crucial momento que vivimos. Permítasenos sumar nuestro empeñoso entusiasmo a la obra del Colegio, que hoy se exalta dentro del marco incomparable de la capital limeña, bajo el alto patrocinio del Presidente Bustamante, la diligente acción del Doctor Graña y el prócer ambiente de la peruanidad.

No me es necesario evocar la firmeza indestructible de los viejos nexos que, dentro del proceso internacional y la afirmación histórica del Nuevo Mundo, unen a México y al Perú. Grande como América es su determinismo y es su conocimiento. Rotundas similitudes geográficas, políticas, históricas, sociales y económicas identifican a los dos pueblos, cuya civilización autóctona maravilló de asombro al conquistador. Semejanzas sorprendentes acentúan durante la Colonia la tradición de sus semblanzas y la magnificencia trascendente de su cultura, confundiendo el parecido en la personalidad de su destino. Gemelos en el paralelismo de la vida independiente, muestran siempre el panorama soberano de un mismo paisaje físico y anímico. Yo, muchas veces absorto en su contemplación, no he sabido con exactitud donde limita mi suave patria y donde comienza la patria hermana, hasta donde llega México y donde empieza el Perú.

Permitidme adentrarme emocionado en el corazón de ustedes, ya que la hospitalidad se nos brinda cariñosa y sin reservas. Permitidme emocionado que. los Reyes, esta Lima florecida de leyenda, tradición bajo el moruno embrujo de la insigne Ciudad de y encanto, renueve en la vieja fe de mis recuerdos el aceite de mi lámpara, para alumbrar insistente el largo camino de la remembranza, la grata recordación de esta Asamblea, que perfumará perennemente el delicado aroma de la cultura y la hospitalidad peruanas.

Translation of the discourse (extemporaneous) of Dr. Manuel A. Manzañilla, Vice-president of the International College of Surgeons, at the solemn inaugural of the Fifth International Assembly in Lima, Peru, 1946.

Your Excellency, the President of the Republic; illustrious Representatives of the Government, diplomatic, university and scientific delegates; Presidents of the College, the Academy of Surgery and the Assembly; distinguished colleagues, ladies and gentlemen:

In the name of the Mexican delegation I have the honor to express with pleasure our support of the noble work of this Assembly, a brilliant, essentially inter-American manifestation of international scientific restlessness, in the critical times in which we are living. Permit me to express my boundless enthusiasm for the work of the College, which today is exalted in the incomparable surroundings of the capital, Lima, under the lofty patronage of President Bustamente, the diligent activity of Dr. Graña, and with the splendid coöperation of the Peruvian people.

It is not necessary for me to evoke the indestructible firmness of the old ties which, within the international scope and historical affirmation of the New World, unite Mexico and Peru. Great as America is its determination and understanding. Broad geographical, political, historical, social and economic similarities identify the two peoples, whose highly developed civilizations filled the Conquistadores with astonishment. Similar surprises accentuated during the colonial period the tradition of their similarities and the transcendent magnificence of their culture, confounding the resemblance in the nature of their destinies. Twins in the parallelism of their independent lives, they also reveal a superb panorama of the same physical and spiritual landscape. I, absorbed many times in contemplating it, have never known exactly where my sweet country ends and where my sister country begins, how far Mexico extends and where Peru begins.

Permit me to penetrate emotionally into your hearts, now that hospitality makes us affectionate and open-hearted. Permit me, moved as I am, under the spell of the dark magic of the "City of the Kings," this Lima steeped in legend, tradition and enchantment, to renew in the old faith of my memories the oil of my lamp, to light insistently the long road of remembrance, the pleasant recollection of this Assembly, which will perennially perfume Peruvian culture and hospitality with its aroma.

After this address the Presidents of the following delegations, in alphabetical order, presented the greetings of their respective governments: for Argentina, Dr. Carranza; for Colombia, Dr. Cavelier; for Canada, Dr. Willinsky; for Costa Rica, Dr. Alvarez; for Chile, Dr. Covarrubias; for Ecuador, Dr. Gilbert; for the Dominican Republic, Dr. Busalleu; for the U.S.A., Dr. Acuff; for France, Dr. Seneque; for Mexico, Dr. Manzañilla; and for Uruguay, Dr. Rivere.

Then the Minister of Public Health and Social Aid, Dr. Julio Ernesto Portugal, in the name of the Peruvian Government, declared inaugurated the Fifth International Assembly of Surgeons; the National Sym-

Professor Graña addressing the visiting members of the International College of Surgeons at the banquet tendered them in Lima, Peru, by the Peruvian Surgical Society.

phonic Orchestra played the National anthem as the Assembly arose to its feet.

Banquet in Honor of the Foreign Delegations

At 10 P.M. in "La Cabana" was served the banquet which the medical institutions and the Medical Body of Lima and Callae offered in honor of the foreign delegations present at the Fifth International Assembly of the International College of Surgeons.

Occupying the speaker's table were the Minister of Public Safety and Social Aid, Dr. Julio Ernesto Portugal; President of the International College of Surgeons, Dr. A. A. Berg; President-Elect of the College, Dr. Francisco Graña; and the Presidents of the Medical Institutions. At the various other tables were seated the members of the foreign delegations and more than 300 surgeons of this Capital and its environs.

Dr. Graña, in short sentences, asked those present for a vote of applause for Dr. Portugal for the aid lent in bringing about the Assembly, and as an expression of appreciation from all the surgeons Dr. Graña's words were followed by prolonged applause.

Dr. Portugal, with fitting words, expressed his thanks for the tribute from the medical body, stating that he accepted it only as a stimulus to continue the performance of his elevated duties.

In the name of the National Academy of Medicine, Dr. Carlos Enrique Paz Soldán expressed appreciation, and after referring to the evolutionary history of surgery in Peru, spoke in cordial phrases to the visiting delegates, stressing also the success achieved by the meeting.

In the name of the Peruvian Academy of Surgery, Dr. Fortunato Quesada emphasized the lofty meaning of the Assembly met in this Capital, and expressed his thanks for the manner in which the foreign delegates had lent their experience and knowledge.

Dr. Enrique Felipe Plaza spoke for the Academy of Stomatology. After referring to the course followed by Odontology in Peru, he toasted the organizer of the meeting, Dr. Graña and the visiting delegates.

Finally, Dr. Romulo Tijero, Secretary-General of the Peruvian Medical Association "Daniel A. Carrion," gave an address in the name of this medical institution, stressing the work achieved by the International College of Surgeons and likewise the success of the Assembly held in the Peruvian capital.

The Closing Session

At 6:30 on the afternoon of March 27th in the Auditorium of Hospital Obrero of the National Bureau of Social Security, the closing session of the Fifth International College of Surgeons took place.

The following presided over this session: the President of the Cabinet and Minister of Public Safety and Social Aid, Dr. Julio Ernesto Portugal; also attending were the President of the Assembly, Dr. Francisco Graña, and the delegates from the various countries.

Initiating the program, Dr. Portugal, Minister of Public Health and Social Aid, read the following address:

"Mr. President of the Fifth Assembly of the International College of Surgeons; and

"Gentlemen:

"Several days ago, in a solemn ceremony which took place in the presence of the Chief of State, was inaugurated the Fifth Assembly of the International College of Surgeons and First Peruvian Surgical Congress. The word of each one of the delegates expressed then the same ideal, identical proposals, a common purpose; human solidarity based on a firmer and more effective comprehension among peoples, and the feelings of security and faith of all the delegates in achieving a better human way of life, built on principles of equality, justice and liberty.

"The International College of Surgeons fulfilled thus, in its first solemn stage, the elevated principles which determined its founding in 1935 in the symbolic city of Geneva. The doctors who established it felt the imperious necessity of a real international link, understanding that science is one with humanity and that it is raised very far above the prejudices and littlenesses of men to defend and protect health, which is the fountain of happiness and well-being.

"Never, as at present, has greater importance been given to the protection of health in the Governmental programs of all countries. Health may be considered, without exaggeration, as the basis for democracy. It is the resultant of a bio-physical equilibrium of an organico-functional unit. Peoples in whom health is whole, it is worth saying, where each inhabitant has a well-balanced physical being, satisfying in an orderly manner his vital instincts and checking his primitive instincts by the force of culture and morale, are peoples in whom democracy will take root most firmly and powerfully. The economic, social and cultural problem of most seriousness in all countries will be the successful transformation of good individual health into mass health.

"Surgery, art and science, today and always, will be powerful agents in the rëstablishment of health weakened by various ailments. The considerable advances of therapeutics with the anti-biotics are limiting the field of medicine; on the other hand, preventive and social medicine are attaining new heights; with this we are in accord. But for many years yet, the seniority of Surgery will persist; its radical therapeutics, at times spectacular, and always profoundly human, whose progress in technic is considerable and which has benefited much, even today, from the valuable acquisitions of physiopathology and from so many other branches of medicine.

"On the matter of perfecting means of defense of our co-nationalists, much ought to be said, but this is not the occasion. It is sufficient, nevertheless, as a tribute to the Assembly of the International College of Surgeons, that the Portfolio which honors me with this position of trust is earnestly engaged in carrying the advances of surgical technic to all the inhabitants of the country, convinced of their right to health and the obligations of the State for adequate assistance. It will not be an easy task. But it is a governmental aim which we are trying to fulfill—the perfecting of hospital aid, building it on the bases advised by scientific technic, and endowing Peruvian doctors and surgeons with the instruments they need to carry on this beneficent work, counting on their devotion, self abnegation and patriotism.

"Gentlemen: The meeting of the Fifth Assembly of the International College of Surgeons, which this ceremony brings to a close, has been a distinction of honor for Peru, for which I thank you in the name of the Government.

"Eminent surgeons from all latitudes have visited us on a generous scientific pilgrimage to set before us the results of their admirable experiences and the example of their consecration to study and improvement.

"Permit me also to express the gratitude of the Government for the manner in which the President of the Organizing Committee has fulfilled his delicate mission, achieving complete success and acting always with the consent of the State, which has interpreted in all its merit this effort in favor of progress and of the excellence of the Peruvian Surgical School.

"Delegates: I beg you to carry to your respective chiefs of State, Scientific and National institutions, the message of solidarity of the Peruvian Government and people, along with the wishes that it formulates for the ever-increasing prosperity of the International College of Surgeons, which must always be an example of human understanding and generosity."

Immediately after, Dr. Albert A. Berg, President of the College, expressed his appreciation for the unlimited aid which the supreme Government and particularly the Minister of Public Health and Social Aid, had lent to the work of the Fifth Assembly of the International College of Surgeons, having made possible the outstanding success achieved.

(For list of foreign delegates, see p. 637.)

At the same session, Dr. Thorek, International Secretary-General of the College, proposed a vote of thanks to Dr. Guillermo Almenara, Superintendent of Hospital Obrero of Lima, stating that the perfect functioning of this modern hospital is due to its recognized staff. He added that the same opinions caused him to express his respect for the Chief of the Surgical Department, Dr. Francisco Graña. After stressing his appreciation to his Peruvian colleagues, not only on behalf of the International College of Surgeons, but for reasons of scientific and human nature, he closed, inviting the members of the Committee to express this vote of honor.

The address of Señor Dr. Felipe de la Torre follows:

Señor Presidente de la República:

Es para mi insigne honor hacer uso de la palabra en esta Asamblea magnífica, que adquiere toda su prestancia y brillo con la calidad de las personas que le dan realce al honrarnos con su presencia. Resiente mi modestia dirigirme á vosotros, autoridades científicas de los paises de todos los continentes y de mi Patria, que os reunis en nuestra ciudad para celebrar la V Asamblea del Colegio Internacional de Cirujanos. Os saludo en nombre de la Academia peruana de Cirugía, porque en esta ocasión, con el regalo de vuestra presencia y el formidable bagage de conocimientos que aportais, serán tratados los. problemas de la especialidad quirúrgica en nuestra Primera Conferencia Peruana de Cirujía.

No hay, ciertamente, entre los principios positivos que ligan á los hombres en la sociedad ninguno que, como la cooperación alcance márgenes tan lejanos en la esperanza humana hacia un mundo mejor. Ella afirma y solidifica los vínculos del azar, ó crea nuevos, ó abre el camino para que el esfuerzo colegiado ó múltiple se traduzca en el beneficio. Por eso la cooperación se universaliza. Por eso la reclama la política, la técnica pura, la ciencia y la investigación. Por eso adquiere dia á dia su característica moral con profundas raices en la sociología, porque la cooperación ha de ser una regla para todos los hombres de todos los sectores del orden social: cooperar para dignificar la vida y sus funciones, para enrumbarla hacia el éxito, para defenderla de la destrucción y la ruina ó cooperar en fin, para afirmarla en los mas elevados propósitos ó en fines puros de la salvación eterna. Todo ello demanda la unión de los esfuerzos para que sean eficaces las decisiones de la voluntad. Cooperar cada vez mas estrechamente para hacer uno y fuerte los múltiples esfuerzos y procurar que sea uno, y celebrado y bueno, el destino de cada grupo humano en su propio orden nacional ó de cada grupo nacional en el vasto ámbito de la humanidad entera.

El aislamiento de hombres y de naciones tiene ya fijada su sede en lejanas y obscuras etepas de la historia. Los hombres en el mundo moderno no pueden subsistir solos y piensan con máxima intensidad en aunar esfuerzos para lograr resultados de un volumen cada vez mayor y de una calidad mejor. No hay ya practicamente, actividad que escape á esta gravitación ineludible y en el orden de la cooperación científica hemos te nido nosotros, la superioridad innegable de haber registrado á traves de nuestros contactos internacionales, no oposición de intereses, sino de con tra posiciones lógicas, es que el esfuerzo científico tiene siempre consecuencias universales. La verdadera, la sana vocació científica es totalmente ajena ó debe serlo, al falso oropel de la vanidad. Esta es la conducta que ha informado las reuniones internacionales de caracter científico. Un tanto alejados del ruido cuotidiano, los trabajos de los hombres de ciencia sirven muchas veces, solo para simple información de las Asambleas. Las conclusiones no viven solo en el mundo de las teorias. Los contactos de estos congresos, nuestros propios contactos internacionales, son sesiones de trabajo, de prácticas pacientemente preparadas para poner en juego las exelencias, no solo de la técnica sino tambien del genio creador que se aparta un tanto de la mecánica, para aplicar á la acción científica su propia concepción.

I he allí, señores, la acción ganada á los inconvenientes de las distancias que separan nuestros pueblos. Esta es la acción de los congresos científicos, que nos unen material y transitoriamente, pero nos dejan en la práctica de la vida profesional un bagaje de riqueza incomparable, y quien sabe si algun elemento nuevo de caracter psicológico para nuestro capital de voluntad científica. Esa magna labor de las coorporaciones científicas es de primera clase, entre nosotros lo tiene que recono cer la ciencia médica, porque estamos lejos de pensar que el conocimiento científico en materia médica, haya alcanzado metas incontrovertibles. Declararlo equivaldría á inaceptable suficiencia. Seria dañoso é inconveniente para el propio desarrollo de nuestra ciencia. Equivaldria á la paralización de todos los esfuerzos. Es conveniente, y esto es ya un lugar comun, declarar que la ciencia médica para su creciente superación, ha menester de esa perenne inquietud que constituye la base fundamental del éxito y del triunfo.

Señores Delegados:

Corresponde hoy al Perú el honor de daros el albergue necesario para que, como hombres de ciencia, tengais un rincón del mundo donde posar el vuelo de vuestro pensamiento científico. Es un honor señanaldo y una satisfacción de nuestra ciudadania prodigar calor y amistad para hacer vuestra presencia venturosa, para realizar una vez mas un llamado de nuestros sentimientos de fraternidad, para permitiros pensar con detenimiento y responsabilidad en todo cuanto atañe á la salud y á la vida que pende de nuestras manos. Os dejaremos el silencio necesario. No hemos de turbar vuestra tarea ni con el ditirambo que os hiera, ni con la presunción y la suficiencia que os haga embarazosa la visita. Estais en vuestra propia casa. Hay en ella la paz y la fé necesaria para meditar con libertad. Los problemas de la hora tienen la gravedad de todas las cosas urgentes. La vida moderna es dinámica y activa, pero está tambien, dolorosamente influenciada por ciertos acontecimientos. La guerra ha dejado una huella de desequilibrio en todos los espíritus. Ha cerrado unas puertas á la violencia de los hombres, pero seguramente ha dejado otras entreabiertas para permitir que viva latente sobre

el género humano el riesgo de su propia aniquilación. La ciencia, en medio de todo este espectáculo negativo se enriquece, sin embargo, porque la ciencia representa la reacción de la vida de una humanidad que no quiere desaparecer. Por eso en medio de la negación y la lucha la ciencia médica ha enriquecido enormenente sus fastos sirviendo entre el fragor, para disimular los dolores ó para rehacer y conservar el elemento precioso que es la vida humana.

He aquí, porque nuestra solidaridad profesional es realmente un obsequio que hacemos á la sociedad general. Es una esperanza mas para quienes sufren el dolor en sus proprias carnes. Es un apoyo para quienes piensan en la necesidad de afirmar la seguridad de la salud y progreso de la especie humana. I si de la paz se trata, nuestra ciencia debe enriquecerse todavía para conseguir que el hogar se afirme, la sociedad se tranquilice y se desenvuelva libre de nostalgias peligrosas ó de la acechanza de la muerte. Por eso nuestra reunión en esta solemne V Asambles del Colegio Internacional de Cirujanos, debe definir puntos de vista de otras latitudes y los nuestros en el común empeño de la lucha contra el mal.

Debo de expresar á los ilustres colegas que nos honran con su visita, en nombre de la Academia Peruana de Cirujía, su gratitud por la contribución de su presencia para prestigio de la Primera Conferencia Peruana de Cirujía. Ha querido la suerte que este certamen, de problemas y trabajos quirúrgicos peruanos, alcance el volumen que le otorga la presencia de espíritu de todos vosotros. por ello, tambien, mi palabra de reconocimiento personal y poruqe con tan promisores auspicios, con tan esclarecido auxilio científico, la Primera Conferencia Peruana de Cirujía no puede menos que ser un éxito completo.

Senores:

Unamos nuestra acción porque una conciencia universal del bien, nos reuna en una religión superior que una todas las voluntades, en esta hora tan solemne para la humanidad y en un momento tan emotivo como este; hagamos que por un esfuerzo comun, con espíritu de superación, con fé inquebrantable en los grandes destinos de la humanidad, elevando nuestros corazones por encima de las miserias humanas, laboremos por el bienestar de todos los habitantes de la tierra.

Dr. Enrique St. Loup, speaking for the Bolivian delegation, said:

"El Colegio Internacional de Cirujanos, como lo veis, está de gala. Sobrado motivo hay para ello. Al influjo del aforismo de Pasteur 'la Science n'a pas de patrie', al árbol plantado en Ginebra se expandió en ramas y dió flores y dió frutos. Y de la semilla esparcida al viento fueron brotando plantas que d enorte a sur, del mar a la moñtaña, ya van cubriendo casi toda la América. Tal ese retoño, muy tierno aún que prendió allá en las faldas del Illimani; tal este vigoroso ya que constituye el Capítulo Peruano, árbol bajo cuyo follaje nos congregamos hoy a la fiesta de la recolección. Serán ópimos los frutos, una parte de la experiencia quirúrgica de toda América ha de mostrarse. Y como la belleza no podía estar ausente de fiesta así magnífica, he aquí para realzarla un jardín florido de bellísimas damas, y allá arriba, simbólico emblema, un arco iris de paz formado con todas las banderas."

Then the Minister of Public Health and Social Aid, in the name of the Government, declared the Fifth International College of Surgeons adjourned.

PROCEEDINGS

HOUSE OF DELEGATES

INTERNATIONAL COLLEGE OF SURGEONS

First Session

TRANSACTIONS AND MINUTES OF THE HOUSE OF DELEGATES *of the* *INTERNATIONAL COLLEGE OF SURGEONS*

Held at the Hospital Obrero, at Lima, Peru. March 24, 1946

1. *Call to Order by President:*

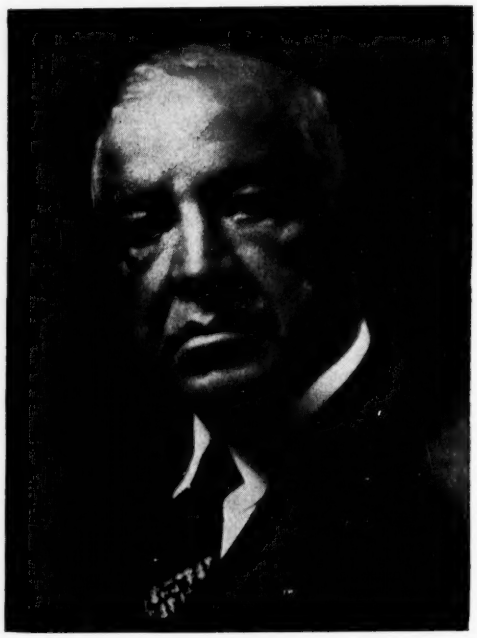
In the absence of the President (Dr. Román), the Senior Vice-President, Prof. Dr. Francisco Graña, officiated in accordance with Article II, Sections 1 and 3 of the By-laws. Dr. Graña, called the opening meeting to order at 11:00 A.M.

2. *Roll Call:*

In addition to a quorum, a large representation from various countries, chapters and governmental representatives was present.

Greetings and communications were received from the following:

Mr. Hamilton Bailey, England
Dr. Valentin Gomez, Bolivia
General Jules Voncken, Belgium
Prof. Eurica da Silva Bastos, Brazil
Prof. Arnold Jirasek, Praha, Czechoslovakia
Prof. Jacob Bitschai, Alexandria, Egypt
Dr. Y. Seuderling, Helsinki, Finland
Dr. Petros Kokkalis, Athens, Greece
Mr. F. R. W. K. Allen, India and Eire
Brig. M. M. Cruickshank, India and England
Prof. Mario Dogliotti, Torino, Italy
Dr. Benvenuto R. Diño, Philippine Islands
Prof. Dr. Francisco Gentil and Antonio Vasconcellos Marques, Lisbon, Portugal
Dr. Dervis Manizade, Istanbul, Turkey



Dr. Désiderio Román of Philadelphia; retiring International President of the International College of Surgeons.

Dr. Felix Cunha, California, U.S.A.
Dr. Morris Fishbein, Illinois, U.S.A.
Dr. Désiderio Román, Pennsylvania, U.S.A.
and many others.

3. *Approval of Minutes:*

The minutes of the House of Delegates of the Fourth International Assembly of the International College of Surgeons, held in New York City, U.S.A., June 14–16, 1943, and the reading of the minutes of the meetings of the Board of Trustees and Executive Council of the International College of Surgeons held on:

October 23, 1943	March 4, 1945
December 18, 1943	June 9, 1945
February 19, 1944	July 28, 1945
May 6, 1944	October 13, 1945
August 5, 1944	November 18, 1945
October 2, 1944	December 6, 1945
December 9, 1944	February 3, 1946

were unanimously approved.

4. *Appointment of Committee on Nominations:*

Dr. Graña, as Chairman, announced the appointment of the following Nominating Committee by the President:

Dr. Manuel A. Manzañilla, Mexico, Chairman
Dr. Jorge Cavelier, Colombia
Dr. Custis Lee Hall, U.S.A.
Dr. Fortunato Quesada, Peru
Dr. James K. Shen, China

Dr. Graña announced that in accordance with Article I, Section 4, of the By-laws, this Committee would submit to the House of Delegates a list of names of one or more members for each of the offices to be filled. Accordingly, therefore, this committee was requested by Dr. Graña to meet, following the Opening Session of the House of Delegates, at the Library of the Hospital Obrero on Monday, March 25, 1946, at 11:00 A.M., to consider the various candidates and prepare the above mentioned list for presentation at the closing session of the House of Delegates on the morning of Wednesday, March 27, 1946, at 11:00 A.M., in the Library of the Hospital Obrero.

5. *Reports of Officers:*

Reports of the President, Secretary and Treasurer were then read and unanimously approved.

6. *Reports of Committees:*

Reports of the *Publication Committee of the* JOURNAL; of the *Editor-in-Chief of the* JOURNAL; of the *Auditing and Appropriations Committee;* of the *Assembly Committee;* of the *European Activities Committee* and of the *Executive Council* were read, discussed and unanimously approved.

7. *Introduction of Resolutions:*

A number of Fellows and Delegates were desirous of introducing resolutions for the purpose of amending the constitution and by-laws of the College, including: Drs. Manzañilla, Graña, Carranza, Hall, Behrend, Acuff, Badzmierowski, Pantoja, Babington, Borjas, Klemme, Thorek and others. Seventeen resolutions were introduced and have been acted upon. The constitution and by-laws have been amended, approved and ordered printed, and a copy of the constitution and by-laws released from the press, embodying these amendments, will be sent to each member of the College.

8. *Submission of Invitations for the Next Biennial Meeting:*

Chairman Dr. Graña announced that invitations have been received from the following countries:

Colombia Chile

It was moved by the Secretary, seconded by Dr. Manzañilla, Mexico, that cordial thanks of the College be extended to the countries from which these gracious invitations have been received; but that decision be tabled until a future date. Motion carried.

9. *Miscellaneous Business:*

A. Honorary Fellowships to be conferred on outstanding individuals were approved.

B. *Necrology:*

It was moved by the Secretary, seconded by Dr. Felipe Carranza of Argentina, that the delegates rise and stand in silence for a few minutes in honor of the memory of our colleagues who have passed away since the last International Assembly, but who are still with us in our hearts:

Dr. Fred H. Albee, Past President, U.S.A.

Dr. Dario Fernandez Fierro, Mexico, Member, Board of Trustees.

Dr. Alberto Gutierrez, Argentina, Member, Board of Trustees.

Dr. Max Meyerhoff, Cairo, Egypt, Fellow.

Dr. Salvador Paredes, Honduras, President, Honduras Chapter.

The delegates rose and remained standing in silence with bowed heads, until the close of the session. * * *

Space does not permit the reproduction of all the communications received from the representatives of various governments. A few follow:

Communication of Professor Dr. A. Ceballos, Vice-President of the College:

Buenos Aires, marzo 21 de 1946

Señor Presidente y Señores Congresistas:

Por especiales circunstancias del momento me hallo impedido del honor de participar en las reuniones del Congreso patrocinado por el International College of Surgeons pero en espíritu me encuentro entre Vds. y deseo expresarle por estas líneas mi franca adhesión y los votos por el éxito de nuestra querida institución. La ciencia y el arte quirúrgico nos unen indisolublemente a través de las fronteras y en estas horas, cuando la humanidad ha escapado victoriosamente del peligro de la esclavitud y vuelve a brillar la libertad con el triunfo de Estados Unidos de Norte América, las otras grandes naciones democráticas y nuestras hermanas continentales, la solidaridad de los hombres de ciencia es una garantía para la ansiada paz del futuro y la perduración de los grandes principios que inspiraron nuestra historia, constituyendo la esencial razón de ser de nuestros países unidos por la democracia y los fundamentales derechos humanos.

Los Congresos como el nuestro contribuyen poderosamente a la unión de las naciones y a la solidaridad de todos los pueblos del mundo, tanto de aquellos que han sufrido los horrores de la guerra para coronarse en la lucha suprema con los laureles de la victoria, como los que sin haber tomado parte en la contienda han vivido ansiosos y entristecidos por el dolor de sus hermanos.

Espero confiado el destino de América para contribuír a la creación de una humanidad mejor y evoco en estos momentos los nombres de Washington, San Martín y Bolivar para que sus mentes iluminen la inteligencia de los ilustres congresistas en su acción no solo de hombres de ciencia sino de ciudadanos del mundo que trabajan en la ciencia para consolidar la paz de las naciones.

Le ruego Señor Presidente aceptar mis votos por la eficacia del Congreso y por el adelanto de la cirugía que en las escuelas americanas actuales tiene tan alta expresión. Le ruego igualmente quiera expresar al pueblo peruano mi admiración y el deseo por el engrandecimiento de la segunda patria de San Martín.

Muy afectuosamente lo saluda su colega y

s. s.

ALEJANDRO CEBALLOS

The Minister of Public Health and Public Welfare of the Republic of Argentina spoke as follows:

Señores:

Hacen algunos días, en ceremonia solemne, que realzó con su presencia el Jefe del Estado, se realizaba la inauguración de la Quinta Asamblea del Colegio Internacional de Cirujanos y Primer Congreso Peruano de Cirugía. La palabra de cada uno de los Delegados expresó entonces, un mismo ideal, idénticos propósitos, un fin común: la solidaridad humana basada en una más firme y efectiva comprensión entre los pueblos, y los sentimientos de seguridad y fé de todos los delegados de conseguir una mejor conviviencia humana, sustentada en los principios de igualdad, justicia y libertad.

El Colegio Internacional de Cirujanos cumplió así, en esa primera etapa solemne, con los elevados principios que determinaron su fundación en 1935, en la simbólica ciudad de Ginebra. Los médicos que lo establecieron sintieron la necesidad imperiosa de una real vinculación internacional, comprendiendo que la ciencia es una en la humanidad, y que se levanta muy en alto sobre los prejuicios y las pequeñeces de los hombres, para defender y protejer la salud, que es fuente de felicidad y bienestar.

Nunca, como ahora, se ha dado mayor trascendencia a la protección de la salud, en los programas de Gobierno de todos los países. Es que la salud se puede considerar, sin hipérbole, como base para la democracia. Ella es la resultante de un equilibrado bio-psiquico de una integridad órgano-funcional, y de la satisfacción adecuada de las necesidades biológicas fundamentales. Los pueblos en donde la salud es integral, vale decir, en donde cada habitante ha equilibrado su fisiologismo, llenando ordenadamente sus instintos vitales y sofrenando sus instintos primitivos por la fuerza de la cultura y la moral, son pueblos donde la democracia encontrará con más firmes y poderosas raices. Problema económico, social, cultural de gravedad diversa, según los países, será el que se deberá vencer para conseguir transformar la buena salud individual, en salud de las colectividades.

La Cirugía, arte y ciencia, será hoy y siempre de una poderosa acción en el restablecimiento de la salud quebrantada por diversas dolencias. Los avances considerables de la terapéutica con los antibióticos van restringiendo el campo de la Medicina; por otro lado, cada vez adquiere mayor auge la medicina preventiva y la medicina social, y con ello estamos de acuerdo. Pero, todavía por muchos años continuará persistiendo el señorío de la Cirugía, de terapéutica radical, a veces espectacular, y siempre profundamente humana, cuyo progreso en técnicas es considerable, y que en mucho se ha de beneficiar, como hasta hoy, de las valiosas adquisiciones de la fisiopatología y de tantas otras ramas de la Medicina.

En el sentido de perfeccionar los medios de defensa de la salud de nuestros connacionales, mucho deberíadecir, pero no es esta la ocasión. Baste, sín embargo, como homenaje a la Asamblea del Colegio Internacional de Cirujanos, dejar constancia de que el Portafolio que me honro en desempeñar, esta vivamente empeñado en llevar los adelantos de la técnica quirúrgica a todos los habitantes del país, convencidos de su derecho a la salud y de la obli-

gatoriedad estatal a su adecuada asistencia. No será labor facil. Pero es propósito del Gobierno, que trataremos de cumplir, y perfeccionar la asistencia hospitalaria, estructurándola sobre las bases que aconseja la técnica, y dotando a los médicos y cirujanos peruanos de elementos apropiados que requieren para efectuar su obra bienhechora, y tanto con su devoción, con su abnegación y con su patriotismo.

Señores:

La reunión de la Quinta Asamblea del Colegio Internacional de Cirujanos, a la que damos término en esta ceremonia, ha constituido una distinción de honor para el Perú, que en nombre del Gobierno agradezco.

Cirujanos eminentes de todas las latitudes han llegado hasta nosotros, en generoso peregrinaje de ciencia, para exponernos el resultado de sus admirables experiencias y el ejemplo de su consagración al estudio y a su perfeccionamiento; por ello, señores delegados, sois merecederes a nuestro mayor reconocimiento.

Séame permitido tambien el expresar la complacencia del Gobierno por la forma como el Presidente del Comité Organizador ha cumplido con su delicada misión, alcanzado completo éxito, y disponiendo siempre del concurso del Estado, que ha interpretado en todo su mérito este esfuerzo en favor del progreso y de la superación de la Escuela Quirúrgica Peruana.

Señores Delegados:

Os ruego seais portadores ante vuestros respectivos Jefes de Estado, Instituciones Científicas y Nacionales del mensaje de solidaridad del Gobierno y Pueblo Peruano, junto con los votos que formulo por la prosperidad cada vez mayor del Colegio Internacional de Cirujanos, que ha de ser siempre ejemplo de comprensión y generosidad humanas.

Dr. Ernesto Escudero, a representative of the Argentine government, delivered the following address:

Señores:

La terca e incomprensible obstinación de la naturaleza me ha impedido llegar a tiempo para asistir desde su comienzo a esta Asamblea formada por los mas destacados miembros del Colegio Internacional de Cirujanos.

El deseo del Gobierno Argentino, así como el de vuestro digno y caballerezco Embajador en mi Patria, era el de con mi puntual asistencia unida a la del eminente cirujano y cancerologo Doctor Carranza estuviesen representadas en esa Conferencia las dos categorías en que se divide la clase estudiosa de todos los paises, esto es: La de aquellos que por sus meritos han recibido la consagración definitiva y la de quienes, mas jóvenes, este es mi caso, pugnan por seguir el mismo camino aunque tal vez, por falta de circunstancias favorables ó por carecer de autenticos valores, no lleguemos nunca a salir del anonimato.

Ha sido una meditada determinación del Excmo. Señor Ministro de Justicia e Instruccion Pública, quien no ha omitido esfuerzos para que a través de valles y montañas llegara hasta el seno de esta Asamblea el eco rumoroso de la sincera simpatía que los Argentinos como parte integrante de ese todo indestructible que es América consagramos hoy como ayer y como siempre a la Lima secular, verdadera lámpara votivo donde siempre se mantuvo encendido el fuego de las más puras é hidalgas tradiciones coloniales.

No lamento las dificultades y molestias que he tenido en mi viaje sino por cuanto ellas me han privado de aprender lo mucho de bueno y original que la simple lectura de los títulos de los trabajos y de los apellidos de sus autores hace lógico presumir y además, justo es reconocer que esas mismas dificultades hacen sobre estimable el honor y el placer de hallarme entre vosotros.

No quiero terminar estas breves palabras sin mencionar el mensaje de solidaridad y afecto que mi maestro y amigo el professor A. Ceballos, me diera para vosotros el dia antes de mi partida. La parte protocolar del mismo la encontrareir en la carta de que he sido portador y que hoy se ha leído en la reunión de delegados. Pero la parte íntima del mismo tiene su expresión en la honda pena que le ha proporcionado el no poder cruzar el continente como tantas otras veces, en pos de sus ideales de superación cientifica y de acercamiento espiritual hacia todos sus hermanos del immense país sin fronteras que sustancia la intelectualidad noble y desciteresada.

Nosotros, mas afortunados que él, hemos podido llegar a esta tierra generosa donde echó raíces el renunciamiento de José de San Martín. Es aquí pues donde se erigió el altar ante el cual hemos de rendir culto a los principios de la cristiana humanidad y diáfana justicia sin los quales no es posible lograr la convivencia armónica y feliz de las naciones.

Finalmente, como delegado Argentino debo proclamar una vez mas los derechos inalienables de la clase médica, para que dignamente ubicada en el clima de libertad y comprension que ella necesita y merece, pueda llevar adelante su lucha contra la enfermedad y el dolor. Solo así será posible reeditar con frecuencia actos de tan bastas proyecciones como esta quinta Asamblea del Colegio Internacional de Cirujanos, pues todos y cada uno de nosotros sabemos sin ningún género de duda, que es por este único camino que han de encontrarse algún dia los pueblos en su marcha angustiosa y claudicante hacia una comunión de ideales, que permita a nuestros hijos disfrutar plenamente de un futuro mejor.

Lima, Marzo 27 de 1946

ERNESTO ESCUDERO
Paraguay 1545
Bs. Aires, Argentina

The General Secretary's report follows:

SECRETARY'S REPORT

TO THE HOUSE OF DELEGATES OF THE INTERNATIONAL COLLEGE OF SURGEONS

FIFTH INTERNATIONAL ASSEMBLY AT LIMA, PERU

March 24, 1946

Gentlemen:

It gives me great pleasure to greet you at the Fifth International Assembly of the International College of Surgeons, and to report to you on the activities of the various phases of my work as International Secretary General during the period since our last International Assembly in New York City in June, 1943.

When I last reported to you, the entire world was engulfed in war. Now we meet in the sunlight of peace, in the age old capital of the Incas, and as we look up to the majestic slopes of the Andes we feel strongly within us hope for the reconstruction of the world into a friendly community of civilized nations wherein all may live in amity. The International College of Surgeons has great plans for the future, and a splendid foundation has been laid during the past years despite the unavoidable obstacles placed in our path by the war.

A survey of our status at the present time shows that several Chapters have been formed since my last Report to you in 1943; and that others are now in the process of formation; while many, through hardships imposed by war conditions, have not been as active as they deserved to be. However, when we consider that Chapters were formed in the midst of global war, it is indeed an achievement for the College, for we suffered many disappointing setbacks, such as loss of valuable mail, interruption of the mails and cable services, and other more serious hardships due to the war.

We now confidently expect that Chapters will shortly be formed in the countries where such have not as yet been established. Preliminary steps have already been taken in:

Canada
Egypt
Finland
England
Greece
India
Italy

At present, we also have representatives in the following countries, with whom your Secretary is constantly in touch:

Australia
Bahamas
Belgium
Chile
Curacao
Denmark
Guatemala
Morocco
Netherlands East Indies
Philippines
Portugal
Rhodesia
U.S.S.R.
Sweden
Switzerland
Syria
Trinidad
Uruguay

As I have indicated, the war delayed our activities, as it naturally did those of all international organizations; but we have just reason to be proud, not only of our splendid progress, but of the fact that we have weathered the dreadful storm of war with our banner still flying aloft.

At this point I wish to pay tribute, and to extend the thanks of the College, to all the forward looking surgeons who are working together so zealously and unselfishly to further the aims and ideals of the College, to carry on our splendid work in those countries in which we have Chapters, and to establish Chapters elsewhere.

In Europe, I wish particularly to mention Mr. Hamilton Bailey and Dr. Rudolf Nissen for their far reaching efforts and whole hearted devotion.

In Latin America, our admiration and gratitude are due Professor Dr. Francisco Graña, our Assembly Chairman, for this magnificent Assembly, and Professor Dr. Manuel Manzañilla for the brilliant work he has performed for the College.

The United States Chapter has grown tremendously, and a great work is being accomplished under the leadership of Dr. Herbert Acuff and his excellent lieutenants.

If I could, I would mention all of the loyal and devoted men who form our International Board of Trustees, but time permits me to bring to your attention only the clear-sighted and devoted leadership of Dr. Désiderio Román, our outgoing President; and the integrity and straightforward vision of our incoming President, Dr. A. A. Berg.

There are surgeons all over the world who should be enumerated; but I can only say that all during the war years, as now, letters have poured into the Secretary's office from surgeons in all parts of the civilized world, breathing enthusiasm for the ideals and purposes of the College. During all these years, the Secretary's office has been in contact, personally and by cable and letter, with the various countries of the world; in some of which, even while bombs were dropping and the institutions of learning and civilization were being shattered, Chapters of the International College of Surgeons were being formed.

Yes, our gains have been many, but our losses have been irreparable. We have lost our Past President of the International College of Surgeons, Dr. Fred H. Albee, and our International Vice President, Dr. Alberto Gutierrez. Both were valiant, greathearted men, devoted to the College, and "we shall not look upon their like again."

While, as previously stated, we have had many obstacles to overcome, some almost insurmountable, a wide survey shows that the early antagonism which greets every new organization has dwindled away to a shadow, and our organization is now recognized as the idealistic, teaching International College of Surgeons which it is. "The truth is great and shall prevail."

I would not be able to close my report without expressing my sincere thanks to *ALL* who have aided me with coöperation, counsel and constructive criticism in carrying out my duties and activities on behalf of the College.

And now, in conclusion, let me say that I know that the great work, so important for humanity, which we have to do in the postwar world will be performed by the International College of Surgeons. It is my profound belief that when I next address you, if God wills, during the Sixth International Assembly of the College, I shall be able to report even greater progress. I truly feel that we shall accomplish the goals and attain the aims we have set, and looking down the years I can see the College growing in size and usefulness, and doing all the work for which it was founded.

DECLARACION DEL SECRETARIO

A LA CAMARA DE LOS DELEGADOS AL COLEGIO INTERNACIONAL DE CIRUGIA

QUINTA ASAMBLEA INTERNACIONAL, LIMA, PERU

24 de Marzo, mil novecientos cuarenta y seis

Señores:

Tengo el placer de saludarlos en ésta la quinta Asamblea del Colegio Internacional de Cirujanos y de darles cuenta sobre los resultados de mis trabajos como Secretario Internacional desde nuestra última asamblea en Nueva York en Junio del mil novecientos cuarenta y tres.

Durante nuestra última relación, el mundo entero se *arrebataba* con la *guerra*. Ahora nos reunimos en la gloria de la paz, en el antigua capital de los Incas. Viendo las sublimes *escotaduras* de los Andes, sentimos alzar el alma con la vista de la rehabilitación del mundo, formandose un conjunto propicio de naciones civilizados donde todos vivaran en recíproca cordialidad. El colegio internacional de

Cirujanos tiene tremendos planes para el futuro, y apezar de los impedimientos puestos en nuestro camino los últimos años, hemos hecho brillantes principios el año pasado.

Examinando nuestra posición al momento, vemos que diversas capitulos se han formado despues del mil novecientos cuarenta y tres; otras se forman en estos momentos; sin embargo, ciertas de nuestras sociedades afiliadas no han podido ser tan activas como querian, a *causa* de la *guerra*. Con todo, considerando que hemos fundado nuevos capitulos durante una *guerra* global, ésta adquisición es a la gloria del Colegio. Naturalmente, hemos sufrido muchos embarazos, como la perdída de correos, interumpcion de comunicaciones telegraficas, y otras molestias directamente resultado de la *guerra*.

Ahora podemos ciertamente esperar que pronto se formarán capitulas del Colegio en muchos paises donde, hasta ahora, no se encontraban establecidos. Tambien, nuestros representantes estan en constante comunicación con el secretario del Colegio sobre las capitulos planeados para todo los paises incluidos en el mundo civilizado.

Como he indicado anteriormente, la guerra ha retrazado nuestras actividades, tal como *sucedió* con otras organizaciones; pero tenemos razon de estar orgullosos, no solamente de nuestro magnifico progreso, sino porque sobrevivimos este formidable calamidad con insignias todavia levantadas.

A este momento quiero dar tributo, y dar tributo, y dar las gracias del Colegio, a todos los cirujanos de vision que tratan de tener arreglos y *entendimientos* colectivos, llevando los objeto è ideales del Colegio a los paises en que tenemos capitulos y en las otras partes del mundo donde todavia no ha llegado nuestra influencia.

En el continente *Europeo*, quiero mencionar con todo afecto al Señor Hamilton Bailey, en Inglaterra, y al Doctor Rudolph Nissen, por sus *esfuerzòs*, notables por todo el mundo científico, y por sus devociones animada en el avánce de la cirugia.

En America Latina, nuestra admiración y gratitude son para Profesor Doctor Francisco Graña, director de la Asamblea, quien hizo todos los arreglos para recibirnos aqui. Tambien quiero dar las gracias al Profesor Doctor Manuel Manzanilla por el trabajo *excepcional* que el ha hecho para el Colegio.

En los Estados Unidos de Norte America, pudiera catálogar a todos los fieles emisores del Colegio Internacional de Cirujanos, pero el limite de este discurso solamente permite mencionar el sabio y fiel *caudillo*, Doctor Desiderio Román, ex presidente del Colegio; tambien, no podemos, ni debemos olvidar, la integridad y directa vision de nuestro nuevo Presidente Doctor A. A. Berg. Ademas, las ramificaciones en los Estados Unidos han cresido enormemente bajo la capaz dirección del Doctor Herbert Acuff y sus hábiles asistentes.

Indudablemente hay otros cirujanos en el mundo que quisiera presentarles, si solamente de nombre, en estos felices tiempos; pero, lo unico que puedo decir es que durante todos los años de esta ultima guerra, como ahora, cartas interminables han llegado a la oficina del Secretario. Cartas de todas partes del mundo civilizado-llenas de entusiasmo para los propositos e ideales del Colegio. Durante todos estos años la oficina del Secretario se puso en contacto personalmente, por cable o por carta, con los paises del mundo, donde durante aquellos tiempos caían bombas en los instituciones de educación, destruyendo la civilizacion, pero, siempre, sin *quebrar* el espiritu humanitario del hombre que seguia, sin interupción, estableciendo capitulos del Colegio Internacional de Cirujanos.

Verdaderamente nuestras ganacias han sido plenas, pero nuestras *perdidas* han sido irreparables. Desgraciadamente, fenecieron el Doctor Fred H. Albee, Presidente Pasado del Colegio y tambien nuestro Vice Presidente Internacional, Doctor Alberto Gutierrez y el doctor *Darío* Fernandez Fierro. Todos, sin *igual*, hombres valientes, con corazon para todos, y fieles al Colegio.

Como hemos dicho antes, hemos tenido que *vencer* muchas difficultades la mayoria insalvable para uno sin espiritu; pero hemos encontrado que la oposición a lo nuevo ya se va *desvaneciendo*, con el resultado que nuestra organizacion ahora esta reconocida como el Colegio Internacional de Cirujanos de *enseñanza* idealistica. La verdad es grande y *prevalese*.

No puedo terminar mi resumen sin expresar mis sinceras gracias a todos los que me ayudaron con su cooperación, consejo, y critica constructiva en la *ejecución* de mis deberes y actividades frente al Colegio.

Para terminar, permitaseme decir que estoy seguro que nuestra gran obra, importante para el progreso de la humanidad, que nos ha caido hace en la post-guerra, será cumplida por el Colegio Internacional de Cirujanos de un modo altruistico. Es mi sincera creencia que cuando me presente otra vez, si Dios quiere, durante la sexta asamblea internacional, pueda reportar progresos más notables, más mundiales y de mas importancia. Creo con todo mi corazon que cumpliremos los fines y ganaremos los *designios* que nos hemos propuesto. Contemplando los años ante nosotros, veo en el horizonte un Colegio *creciendo* cada vez mas y siguiendo los beneficios que todos nosotros esperamos de el.

Closing Session

TRANSACTIONS AND MINUTES OF THE HOUSE OF DELEGATES

of the

INTERNATIONAL COLLEGE OF SURGEONS

Held at the Hospital Obrero, at Lima, Peru. March 27, 1946

1. *Roll Call:*

Roll call showed that a quorum and large attendance was present upon which the presiding officer, Professor Graña, declared the meeting open.

2. *Consideration of Unfinished Business of the Preceding Session:*

A. *Vote on Resolutions to Amend Constitution and By-laws:*

Prof. Graña pointed out that, according to Article X, Section 1, of the Constitution, and Article IX, Section 1, of the By-laws, the Constitution and By-laws of the International College of Surgeons may be amended by a two-thirds vote of the delegates present and voting at the Assembly, provided that the amendments shall be presented on the first day of the meeting, which was done at the Opening Session on March 24, 1946, and a period of not less than twenty-four hours must elapse before such vote. Dr. Graña ordered the Resolutions to amend the Constitution and By-laws to be read in English and Spanish, whereupon they were read to the delegates in both languages.

It was moved by Dr. Manzañilla that since approximately 72 hours had passed since the first reading of the resolutions to amend the Constitution and By-laws, that all the amendments presented be ratified, approved and adopted as presented and incorporated in the Constitution and By-laws of the International College of Surgeons. This motion was seconded by Dr. Cavelier of Colombia and unanimously carried.

3. *Miscellaneous Business:*

A resolution introduced by Dr. Herbert Acuff regarding the work of the General Secretary since the inception of the College was unanimously carried.

4. *Report of Committee on Nominations:*

The report of the Nominating Committee (all members of this committee being present) was read by Dr. Manuel A. Manzañilla, Chairman. The list of officers, members of the Board of Trustees, and representatives were placed in nomination as follows:

Dr. Albert A. Berg, U.S.A., President.

Dr. Francisco Graña, Peru, President-Elect.

Dr. Desiderio Román, U.S.A., Immediate Past-President.

Dr. W. W. Babcock, U.S.A., Vice-President.

Dr. Manuel A. Manzañilla, Mexico, Vice-President.

Dr. Herman de Las Casas, Venezuela, Vice-President.

Dr. Custis Lee Hall, U.S.A., Vice-President.

Mr. Hamilton Bailey, England, Vice-President.

Dr. Pablo L. Mirizzi, Argentina, Vice-President.

Dr. Jorge F. Cavelier, Colombia, Vice-President.

Dr. Herbert Acuff, U.S.A., Treasurer.

Dr. Max Thorek, U.S.A., Secretary-General. (Perm.)

Trustees

Dr. Luis D. Alfaro, Panama.
Dr. Lyon H. Appleby, Canada.
Dr. Fahri Arel, Turkey.
Dr. Charles H. Arnold, U.S.A.
Dr. Harry E. Bacon, U.S.A.
Dr. Moses Behrend, U.S.A.
Dr. Jacob Bitschai, Egypt.
Dr. Alfredo Borjas, Venezuela.
Dr. Rafael Angel Grillo, Colombia.
Dr. Arnold Jirasek, Czechoslovakia.
Dr. Roland M. Klemme, U.S.A.

Dr. Petros Kokkalis, Greece.
Dr. V. V. Lebedenko, Russia.
Dr. J. Heng Liu, China.
Dr. Felix Mandl, Palestine.
Dr. John Royal Moore, U.S.A.
Dr. Martial Bourand, Haiti.
Dr. Oswaldo P. Campos, Brazil.
Dr. Felipe F. Carranza, Argentina.
Dr. Alejandro Ceballos, Argentina.
Brig. M. M. Cruickshank, India.
Dr. Mario Dogliotti, Italy.
Dr. Jorge Gouvea, Brazil.
Dr. Rudolf Nissen, U.S.A.
Dr. Cesare A. Pantoja, Colombia.
Dr. Fortunato Quesado, Peru.
Dr. Enrique St. Loup B., Bolivia.
Dr. Raul D. de Sanson, Brazil.
Dr. Y. Seuderling, Finland.
Dr. James K. Shen, China.
Dr. Antonio Torres Estrada, Mexico.

Representatives

Dr. Paul Martin, Switzerland.
Dr. Charles Juillard, Switzerland.

5. *Election of Officers:*

Dr. Babington, U.S.A., moved that the Secretary be instructed to cast one vote signifying the unanimous election of all the officers, trustees and representatives, as presented by the Chairman of the Nominating Committee. This motion was seconded by Dr. Gariepy, U.S.A., and unanimously carried.

The Secretary, Dr. Max Thorek, cast one vote, confirming the election of the nominees, and the presiding officer, Dr. Graña, declared the slate of officers, board of trustees and representatives duly elected.

Chairman Dr. Graña thereupon appointed Dr. Acuff, U.S.A., Dr. Shen, China, and Dr. Manzañilla, Mexico, to accompany Dr. Albert A. Berg, President-Elect, to the Chair, for installation as President of the International College of Surgeons for the ensuing term.

6. *Installation of Officers for the Ensuing Term:*

Address by the Outgoing President:

Address by Dr. Désiderio Román, outgoing President, was presented by Dr. Graña, as follows:

THE FIFTH INTERNATIONAL ASSEMBLY OF THE INTERNATIONAL COLLEGE OF SURGEONS

As President of the International College of Surgeons, it is my privilege and great honor to address words of welcome and greeting to the Delegates, visiting surgeons, scientists and medical men from all parts of the world who are attending the Assembly.

These are days of international interest throughout the world, as never before in history. This interest, primarily born in national aspirations and for self existence, is urged and propounded by the force of modern progress and evolution with compelling evidence which makes science the common property of mankind.

We are living today in a spirit of internationalism as a goal and product of our civilization. One world, one common effort under international desires for the perfection of knowledge and for the peace and amity of humanity. The International College of Surgeons has undisputed existence as the vehicle by which national aspirations are united under one banner of international brotherhood and coöperation and it can and will exert its influence to attain the sacred purposes of an international brotherhood in science as well as in political, economical and other energies in which mankind is primarily interested.

The International College was conceived and founded with purposes and objectives transcending any scope heretofore projected in the art and science of surgery, bringing into close collaboration the foremost exponents of proficiency and ethics in surgery and surgical specialties.

The College and its Chapters in all parts of the world constitute the integral organization which, by democratic channels, seek to make accessible to aspiring young surgeons the best of the world's facilities and opportunities for training and experience to insure learned and skilled practice of surgery in general and in its correlated specialties.

The Fifth International Assembly of the International College of Surgeons, inaugurated in this Assembly, at the invitation of the Government of Peru and jointly with the national medical organizations, universities and hospitals in this great historic capital, is destined to record its achievements as epoch making in the annals of modern progress.

The life history of the International College of Surgeons is now eleven years in course, and it has been my privilege and opportunity to be affiliated with it, by Fellowship, for nine years and in official executive rôle for the past six years, so that I have shared with the brilliant Founders of the organization the entire history of its development and rapid strides in pursuit of its objectives and basic principles.

The happiest moments of my professional career are intimately bound with the lofty aspirations of the College and the most significant and outstanding achievements can well be said to be, first, the confidence and respect in the minds of the Founders and pioneers in the ideals of the organization and the unselfish devotion to it through the crucial days of a small membership and limited finances, when those in authority spent freely out of their own purses in firm determination to achieve, and brook no obstacles, in the interest of the College and its success.

Another factor that has hugely contributed to the rapid progress of the International College of

Surgeons has centered itself upon the vision and courage of its pioneers who, notwithstanding the impediments of the vast war efforts in transportation and other facilities, have held Assemblies in accord with the provisions of its Constitution and By-laws, and that vision and that courage turned the activities of the annual Assemblies to scientific programs and contributions to the surgery of the war, thus adding interest and timely energy to the diffusion of knowledge gathered from the destructive ravages of war and sickness.

Precious time was gained in the growth of the College, in the growth of its interest, and in the growth of its appeal for the advancement of surgery, and the open door policy for young surgeons, not only of the Americas, and I lay emphasis upon this, but of the aspiring young surgeons of the world.

When I was inducted into office in February, 1940, as President of the United States Chapter, the Fellowship of that Chapter was scarcely over three hundred. Today, at the termination of my official duties with the International College, during the Fifth International Assembly of the College, in this beautiful and historical city of Lima, I am informed that the roster of the United States Chapter is well over one thousand members, and other International Chapters have shown similar growth and expansion.

The College today has grasped the hand of the leading surgeons of the world in convincing brotherhood of effort, so that now with the war over, the International facilities will permit the infiltration of the constructive aspirations of the College to every nook and corner of the earth.

The priceless legends of philosophic, cultural and scientific Greek medicine, the enlightened heritage of the proudest period of pre-Christian medicine, suffered almost complete destruction at the hands of the barbarians of the north, and the victorious Roman legions, for let us not forget the destruction by fire of the priceless library of Alexandria by Julius Caesar. Were it not for the grasp and foresight of a handful of able translators in the remnants of the Roman Empire of the east, the Byzantines, the Arabians, migrating with the Phoenicians and the Saracens, all along the southern Mediterranean Coast to the Spanish peninsula, where they found haven and shelter and complete safety to engage in translating and in piecing together or altering the text in the confusion of languages, all that was left of Greek and Greco-Roman medical lore, the basic knowledge of ancient writings, would have been lost for us.

The ravages of the present war, unequalled in history, the gathering of armies of millions of men, found the medical profession dedicated and devoted to the service of the armed forces, with wealth of knowledge and equipment, in which the success in the prevention of epidemics and in the treatment and rehabilitation of the fighting men have surpassed all recorded efforts and brought to us responsibilities for the future, such as the collaboration of all nations for an international school, where the experiences gained from this devastating war by preventive knowledge and the endless advancement made in prophylaxis and in the rehabilitation of the sick and shocked, as well as the injured, will insure the accomplishment of the ideals of the International College of Surgeons.

Thus the vast medical research and knowledge accumulated in these last long years of annihilation finds us better prepared to realize upon the progress of our science than at any time in the history of wars. The basic principles which have given birth and status to the International College of Surgeons, the abnegation and devotion of its Founders and Pioneers, the holding of annual Assemblies, the organization of Guild meetings, and the regular publication of the JOURNAL to keep in touch the thousands of surgeons interested in our science, have helped undoubtedly in the rapid advancement and popularity of our organization. A steadfast, unremitting devotion, the regularity of our meetings and conferences, and the publication through the JOURNAL of our work, I repeat and repeat, are the stepping stones which have brought about the success of the International College.

In order to sustain and maintain this progress we must resolve to unite, with all the strength of our convictions, to diffuse our influence by the united effort and collaboration of the genius and the talent of all the outstanding and ambitious surgeons in all parts of the world. This is our opportunity to reach our goal. We cannot—indeed no one can, no group will—succeed except by united effort, and while we of the medical profession cannot properly undertake to solve the problems of the world in its present post-war confusion and tension, yet our cultural task puts us in a unique position to help to balance the powers which will react in favor of the maintenance of peace and security, for indeed it is through culture and reason that we can appeal to the great masses in order that we may continue to live in peace and prosperity.

Permit me to close these few lines emphasizing to you all my profound disappointment in that I find myself unable to attend this important Assembly, and to be with you all, my Colleagues, and I salute you all with my very best wishes and warm-hearted hopes.

For the progress of science and for the welfare of humanity—forward!

Address by Dr. A. A. Berg, President:

Dr. A. A. Berg, President, spoke extemporaneously as follows:

Prof. Graña, Honorable Secretary, members of the Chapters throughout the world represented here in person or by proxy, and appointed by your respective governments:

Dr. Graña, I salute you for your excellent meeting. Would that I were given a flow of speech in which to thank you and to express to you the deep feeling of emotion I have at present, being asked to preside over your deliberations and actions for the next two years.

The International College of Surgeons is a growing organization. We have gone through the labor pains of birth. We have suffered the pangs of infancy. We have now grown out of childhood and are entering upon our adolescence. We have yet to realize the full significance and importance of the international army of science which our College represents. That will come gradually to the surgeons of the Americas and the Chapters throughout the world. This College is not the property of one nation. I cannot emphasize too strongly that it is

an International College, whose members belong to all the nations of the world.

Now, there are some very important things we need. We need first of all a "steering committee." The meetings thus far have been held in the United States of America, with the exception of an outstanding Assembly in Mexico in 1941. It would be impossible for men from all over the world to attend the meetings of the International Board of Trustees held in the United States approximately every fourth month.

Therefore the Board has no way of knowing what Peru, or India, or other countries may desire. We must have representatives, elected by your various Chapters, to represent you in this "steering committee." You must indicate to your representative what your activities are, what your desires are, and what is needed in your respective countries. He must keep in touch with the members of the Board of Trustees who represent your country, or your part of the world, and let the Board know what activities you deem most necessary and what is needed in your respective countries so as to help the Trustees decide what course to take in their deliberations.

We have a JOURNAL. The power of the press is great, and our JOURNAL is already an outstanding scientific journal. We have a Spanish section, and it is expected that shortly we will add other language sections, such as French and Italian. Furthermore, all articles are summarized in French, Spanish and Russian. However, the JOURNAL now appears every two months, and it is the deepest desire of the International Officers and Board of Trustees to arrange for its appearance every month. It will mean sacrifices on our part, but we look forward to it.

Let me say once more that each Chapter throughout the world is most important, and equally important, to the College. It is an International College, and it is your College. No action on our part is final until the trustee from your locality has passed on it. No action can be taken until you have been acquainted with that action before it becomes final. So, you see that this is a democratic organization. It is not an institution in which one or two control everything. It will be guided by your representative. It will be in possession of a great JOURNAL, and we will go forward always. While we are men of moderate means the finances need not worry you. They will be forthcoming.

In closing these remarks, I wish I could express to you the deep emotions I feel. Let me say in closing as Coleridge said when he viewed Mt. Blanc:

"Hoary Mt. Blanc!
Dread Ambassador from Earth to Heaven
Fill you the silent sky
And tell yon rising sun that Earth with her thousand voices praises God."

And so with our voices let us praise God for the birth of the International College of Surgeons, and we pray that with His blessing we shall have much to which to look forward.

7. *Announcement of Committee Appointments by Newly Installed President:*

Dr. Berg announced that he would make his committee appointments later, after a close study of the matter.

8. *New Business:*

A. Dr. Babcock thanked the delegates for the honor bestowed on him in being named Senior Vice-President.

B. Dr. Thorek moved that a rising vote of thanks be given Dr. Guillermo Almenora and Professor Dr. Francisco Graña for their splendid work in making the Assembly a success.

C. Dr. Thorek recommended that thanks be extended to Dr. Desiderio Román, retiring President, for his magnificent work during his term of office as President.

D. The Secretary moved that a vote of thanks be extended to Dr. Louis J. Gariepy of Detroit for his generous offer to defray the expenses of printing a College roster.

E. Dr. Acuff moved that the Assembly's appreciation be expressed to all the members of Dr. Graña's committees for the fine work accomplished. He also expressed admiration for the City of Lima and for the high standards of the Hospital Obrero.

F. It was moved by Dr. Thorek that Dr. William Seaman Bainbridge be given a vote of thanks and gratitude and also the degree of Honorary Fellow for his splendid services as treasurer during many trying years.

The above motions were duly seconded and unanimously carried.

9. *Adjournment:*

There being no further business, Dr. A. A. Berg, International President, adjourned the House of Delegates.

Sección en Español

Ginecomastia; Nueva Tecnica Operatoria

ERNESTO F. MALBEC, M.D., F.I.C.S.
BUENOS AIRES, ARGENTINA

HASTA el presente, muy pocas técnicas operatorias se han dado a conocer para corregir la ginecomastia. Nosotros, que nos ocupamos ya del asunto últimamente en nuestro servicio, y que utilizamos con preferencia en las pequeñas hipertorfias de la glándula mamaria masculina.

Fig. 1. Mediante una sola puntura a nivel del extremo externo del surco submamario se practica la anestasia.

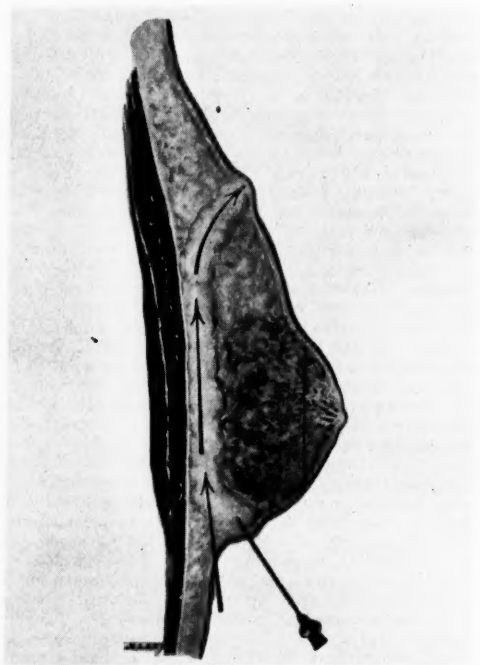


Fig. 2. La aguja infiltra todo el espacio retromamario, llegando al tejido celular y a la piel en todo su contorno.

Toda vez que ejecutamos esta operación, lo hacemos con anestesia local, mediante una solución de novoadrenalina al 1%, bloqueando con una sola puntura toda la glándula, a través del espacio retromamario, tal cual se indica en la figura Nº 1 y en la figura Nº 2. Trazamos luego la incisión de la piel, en semicírculo, bordeando la mitad de la aréola con una pequeña prolongación vertical

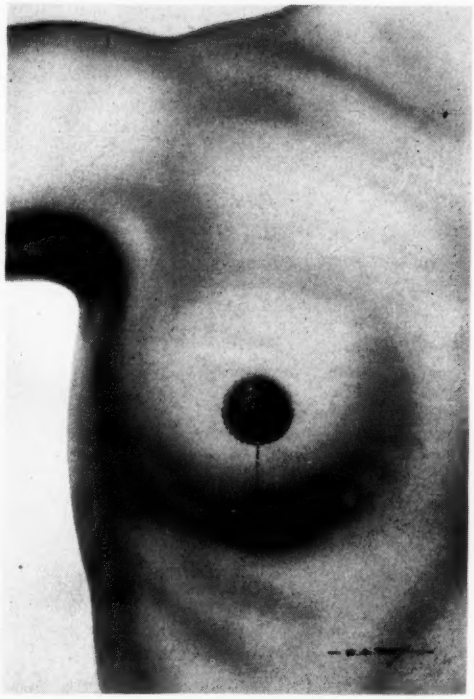


Fig. 3. Incisión periareolar con prolongación vertical.

inferior (fig. 3). Liberamos, a continuación ambos colgajos cutáneos (fig. 4). Con un bisturí bien afilado seccionamos transversalmente la glándula, de modo que una parte superficial de la misma quede adherida a la zona aréolomamelonar (fig. 5). Mediante este arbitrio quirúrgico se impide su hundimiento ulterior, manifiestamente inestético. Una vez efectuados todos estos tiempos, corresponde extirpar el resto de la glándula, cosa que se hace mediante una disección roma, empleando el dedo índice o una tijera curva de Mayo. La glándula es así removida (fig. 6). Con puntos separados simples se cierra la brecha (fig. 7). Nunca dejamos dren, aplicando siempre una curación grasa y telas adhesivas.

SUMMARY

A new operative technic for gynecomastia is reported.

RÉSUMÉ

Une nouveau technique opératif pour gynecomastie set rapportée.

RESÚMEN

Se describen una nueva técnica operatoria para la ginecomastia.

Свод

Сделан доклад новой оперативной техники при гинексомастите.

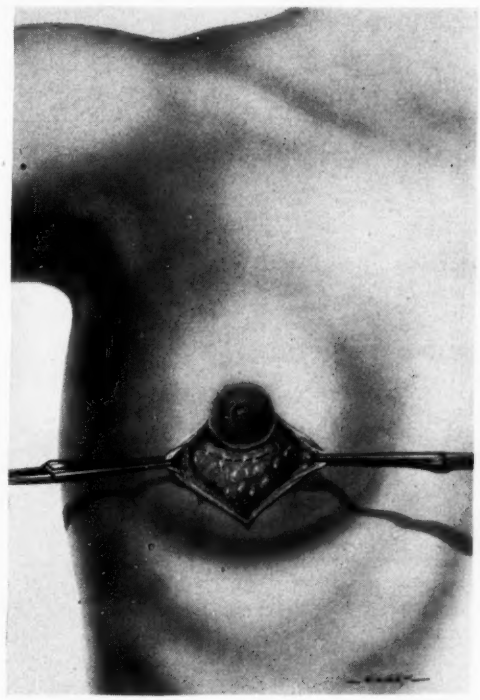


Fig. 4. Disección de los colgajos cutáneos.

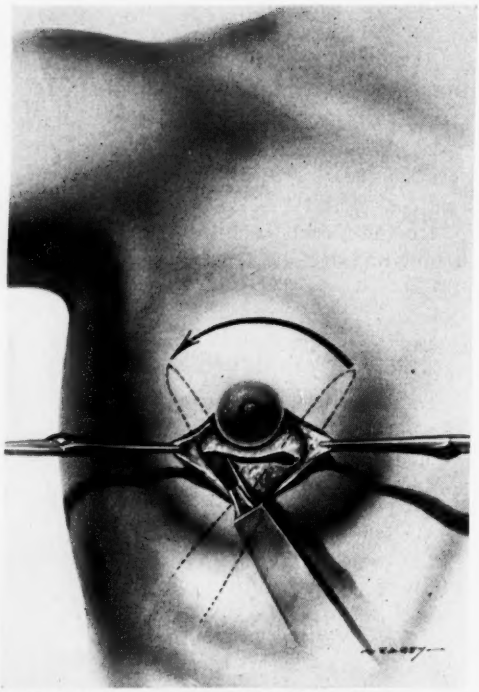


Fig. 5. Se deja adherida a la cubierta cutánea la parte superficial de la glándula correspondiente a la zona aréolomamelonar.

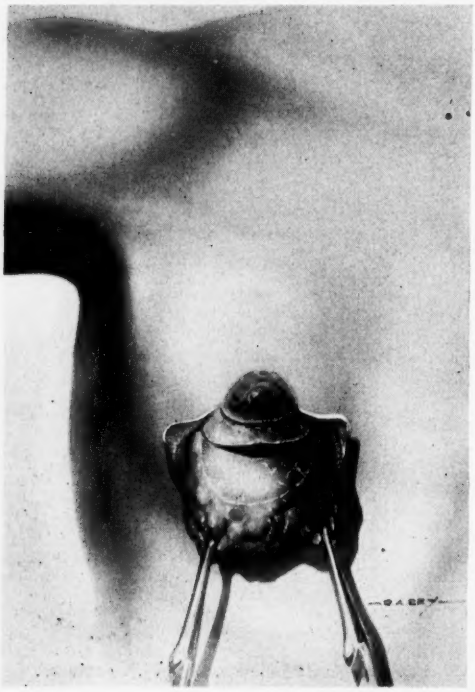


Fig. 6. Se extrae la glándula previa liberación roma de la fascia pectoral.

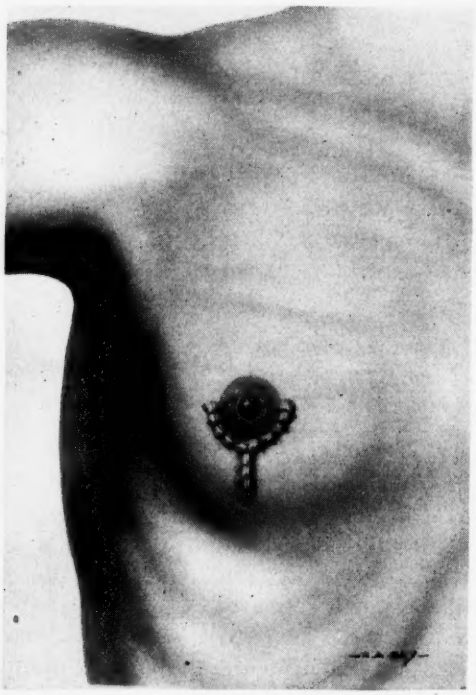


Fig. 7. Cierre de la brecha con puntos separados simples.